

APPENDIX NN

Section 106, Cultural Resources Report

TABLE OF CONTENTS

SECTION 106 CULTURAL RESOURCES REPORT SUMMARY	NN-S-1
PART 1 ARCHAEOLOGICAL RESOURCES AND TRADITIONAL CULTURAL PLACES ASSESSMENT	NN-1
PART 1 APPENDIX 1 – INDIVIDUALS AND AGENCIES CONTACTED	NN-82
PART 1 APPENDIX 2 – TRIBAL CORRESPONDENCE	NN-84
PART 1 APPENDIX 3 – HISTORIC FEATURES WITHIN THE SEATTLE MONORAIL PROJECT GREEN LINE	NN-100
PART 1 APPENDIX 4 – CULTURAL RESOURCES SURVEY COVER SHEET	NN-115
PART 2 HISTORIC RESOURCES - TECHNICAL REPORT	NN-117
PART 2 APPENDIX 1 - AGENCY CORRESPONDENCE	NN-258
PART 2 APPENDIX 2 - HISTORICAL RESOURCE INVENTORY FORMS	NN-296
PART 2 APPENDIX 3 - HISTORIC RESOURCE INVENTORY TABLE AND MAPS	NN-299
PART 2 APPENDIX 4 - VISUAL SIMULATIONS	NN-351
PART 2 APPENDIX 5 - PIONEER SQUARE AREAWAYS MITIGATION STUDY	NN-370
PART 2 APPENDIX 6 - GREEN LINE EIS AREAWAYS STUDY	NN-404
PART 2 APPENDIX 7 - SEATTLE MONORAIL PROJECT DRAFT MEMORANDUM OF AGREEMENT	NN-468

APPENDIX NN

Section 106, Cultural Resources Report Summary

INTRODUCTION

Section 106 of the National Historic Preservation Act (NHPA) of 1966 and Executive Order 11593 require that effects of federally-assisted undertakings be examined for all historic districts, sites, buildings, structures or objects, and archaeological sites listed on or eligible for inclusion in the National Register of Historic Places (NRHP). Federal agencies must coordinate with the State Historical Preservation Office (SHPO) and obtain the review and comment of the Advisory Council for Historic Preservation (ACHP) before undertaking projects that affect such properties. The ACHP has established regulatory procedures for protection of historic and cultural properties in or eligible for the NRHP (36 CFR 800).

This report identifies and provides an assessment of effects to historic resources for the proposed Green Line. Detailed discussion of the historical and archaeological resources is provided in the following Seattle Monorail Project - Green Line Cultural Resources Technical Report.

The Green Line's potential effects have been evaluated in six geographic segments: Ballard, Interbay/Magnolia, Queen Anne/Seattle Center/Belltown, Downtown/Pioneer Square, SODO/Chinatown International District/Pioneer Square, and West Seattle. A summary of the types and numbers of resources identified through field surveys and research, the consequences of alternative approaches and options, and a discussion of mitigation measures is presented in this report.

CULTURAL RESOURCE REGULATIONS

NEPA requires consideration of effects of an undertaking on cultural resources before an undertaking is approved. 36 CFR Part 800 allows for NEPA/Section 106 consideration. As a result, this report has been structured to comply with NHPA in addition to NEPA.

Section 106 of the NHPA of 1966 (as amended) requires federal agencies to assess effects of all federal undertakings as defined in 36 CFR 800.16(Y). Because the U.S. Coast Guard review for water crossings is a federal undertaking, federal regulations under the National Historic Preservation Act (NHPA) apply. The U.S. Coast Guard has delegated its Section 106 lead agency responsibility to the Seattle Monorail Project (SMP) (see Agency Correspondence, Appendix 1). Under Section 106 of the NHPA, the Federal agency or its designee must consider the effects of the undertaking on historic properties, defined as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register of Historic Places..." (36 CFR 800.16). Included in this definition are artifacts, records, and remains that are related to and located in such properties, as well as properties of traditional religious and cultural importance (traditional cultural properties) that are eligible for inclusion in the NRHP.

The Washington State Environmental Policy Act (SEPA, RCW 43.21C) and implementing rules in Washington Administrative Code (WAC 197-11) also apply to the Green Line. SEPA requires the

identification of significant adverse effects to historic, archaeological, and cultural resources listed in or eligible for the national, state, or local registers. Measures must be considered to reduce or control effects to historic properties due for demolition or already identified as Seattle Landmarks affected by a proposed undertaking.

In adopting SEPA rules, the City of Seattle established environmental policies and procedures specific to historical resources. Procedures related to historic properties require compliance with the Landmarks Preservation Ordinance (SMC 25.12), and resources that appear to meet the criteria for Landmark designation must be identified.

During SEPA review, the Department of Construction and Land Use – Department of Neighborhoods Interdepartmental Agreement on Review of Historic Buildings stipulates that buildings over 25 years old be reviewed for historical significance prior to the issuance of a demolition or construction permit (1995).

The City's Historic Preservation Officer may require specific mitigation measures when a property of historical significance is affected by an undertaking or when a proposed undertaking is located adjacent to or across the street from a designated City landmark or landmark district.

The Homeland Security Act of 2002 transferred the U.S. Coast Guard from the U.S. Department of Transportation (DOT) to the U.S. Department of Homeland Security (DHS). Prior to passage of the Homeland Security Act, the U.S. Coast Guard's bridge permit program had been a DOT program. As a DOT agency, the U.S. Coast Guard was responsible for implementing Section 4(f) of the Transportation Act of 1966, which requires DOT agencies to perform a particular type of alternatives analysis for transportation projects that use any land from a public park, recreation area, wildlife and waterfowl refuge, or any historic site. The Homeland Security Act transferred the U.S. Coast Guard's bridge permitting program and the authority and functions of the Secretary of Transportation related to that program to DHS. As a result, a Section 4(f) analysis is no longer required for U.S. Coast Guard permit actions.

METHODS

Description of Area of Potential Effect (APE)

The Green Line is a linear system that will, by necessity, cross by many areas where there are numerous cultural resources. Consideration of effects involves not only a direct effect such as an acquisition, alteration, or destruction of a cultural resource, but must also include consideration of changes within a undertaking's setting. For the Green Line, an Area of Potential Effect (APE) was established to include "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects for an undertaking may be different for different kinds of effects caused by the undertaking" (36 CFR800.16 (Y)).

The Area of Potential Effect for archaeological resources includes areas along proposed alternative alignments and options where subsurface construction disturbance for guideway columns, bridge piers, stations, or an operations center may occur. The Area of Potential Effect was defined by

reviewing schematic footprints of stations and operations facilities, and by the approximate locations of the routes of alternative alignments and options within segments.

The APE for buildings and structures over 50 years old includes resources adjacent to (within 100 feet) of the alternative locations for guideways and stations. Within the Downtown and Queen Anne/Seattle Center/Belltown segments, the APE was expanded around station locations to include resources within 200 feet of the stations, due to the presence of historic districts and the density of unaltered historical resources. Based on consultation with the SHPO and the City of Seattle Historic Preservation Officer, the APE was also expanded in the Downtown Segment near the NRHP Pioneer Square and Pike Place Public Market Historic Districts. At the Pioneer Square Historic District the APE extends 200 feet on either side (east and west) of the guideway at the intersections of Second Avenue and Columbia Street, Cherry Street, James Street, Jefferson Street, Yesler Street, Washington Street, Main Street, and Jackson Street. Only the buildings and structures adjacent to the road in the above-listed areas are included in the APE. In the vicinity of the Pike Place Public Market Historic District, the APE extends from Second Avenue and Pike Street west along Pike Street and from Second Avenue and Pine Street, west along Pine Street, two blocks to the boundaries of the historic district.

Methodology

The Seattle Monorail Project assessed archaeological and traditional cultural places through archival review, assessment of data in geotechnical boring logs, archaeological field reconnaissance of a portion of the Pioneer Square Historic District, and consultation with the Duwamish Tribe, the Muckleshoot Indian Tribe, the Suquamish Tribe, and the Tulalip Tribes. An archaeological survey of areaways was conducted beneath Second Avenue S, within the Pioneer Square Historic District, to determine if intact archaeological deposits occurred in the lowest story of pre-1889 buildings, several feet beneath contemporary sidewalks. The Sinking Ship Areaway Site (45KI685), a historic period archaeological site, was recorded on the south side of Second Avenue S in the Downtown Segment of the Seattle Monorail Project.

Historical resources were assessed by obtaining relevant previously prepared nomination forms, inventory forms, or SHPO correspondence, conducting field investigations on all segments, and conducting research at the Seattle Public Library, Washington State Archives, and City of Seattle Department of Construction of Land Use. Under the field survey, historical resources were recorded according to the following categories:

- Category A Significant (previously listed in the NRHP, WHR, Seattle Landmarks, or determined eligible for listing in the NRHP)
- Category B Unaltered resources within the APE that were further researched to determine historical significance.
- Category C Modified resources lacking historical integrity or historical resources from the later period without important historical or architectural associations.

Project architectural historians prepared historical resource summary sheets that included a current photograph of the resource, property address, date of construction, a brief summary of the

resource's history, a list of any modifications to the resource, and a statement of its historical significance. All documentation compiled concerning historical resources, and neighborhood historical context statements for each segment were submitted to the Washington SHPO and the Seattle Historic Preservation Officer for review. Follow-up work sessions were held with project staff and the agencies to obtain concurrence regarding determinations of eligibility for the NRHP, WHR, or listing as a Seattle Landmark, and review of project effects and mitigation measures.

The Seattle Monorail Project initiated tribal consultation by sending letters explaining the project to the chairpersons and cultural representatives of the Muckleshoot Indian Tribe, the Suquamish Tribe, the Tulalip Tribes and the Duwamish Tribe. LAAS followed the letters with calls to each of the designated cultural representatives to request information about traditional cultural use of the Seattle Monorail Project. The Muckleshoot Indian Tribe concurred with LAAS' proposed assessment methodology, but had no further comments (Donna Hogerhuis, personal communication 2003). The Suquamish Tribe (Charlie Sigo, personal communication 2003) expressed concern for the disturbance of unknown archaeological resources in former shoreline areas in Salmon Bay, Interbay and Pioneer Square. The Tulalip Tribes (Hank Gobin, personal communication 2003) asked that we refer to a Standard Operating Procedures letter, which requests that project proponents conduct cultural resource assessments before project construction, avoid adversely affecting plant and faunal resources, and protect water and fisheries resources. The Duwamish Tribe (James Rasmussen, personal communication 2003) cautioned against the disturbance of archaeological resources during pillar installation and station construction, especially in Pioneer Square.

Numerous agency work sessions were held with the SHPO and the City Historic Preservation Officer and interested parties to determine the eligibility, adverse effects and mitigation measures for all historic resources in the APE of the Green Line. A list of all meeting and agency work session dates, meeting subject, and persons present is listed in the Agency coordination Historic Resources Section of this report.

Since the publication of the Green Line Draft EIS in response to comments from the public agencies, several alternatives not studied in detail in the Draft EIS and several refined station locations have been added for detailed review in this Final EIS. This resulted in additional field investigations of 45 additional buildings. In the new study areas, architectural historians conducted field investigations to identify resources that appeared eligible for the NRHP. Preliminary recommendations regarding the NRHP eligibility of these resources have been included in the Final EIS.

Since issuing the Draft EIS, architectural historians also conducted a study of areaways outside the Pioneer Square Historic District. Areaways are the space directly beneath the sidewalk, between the building walls and the street wall. Areaways are the result of turn-of-the-century projects that raised the height of the roadways above the first floor of existing buildings. In 2003, a separate study of areaways in the Pioneer Square Historic District was conducted (Parsons Brinkerhoff and Sheridan Consulting Group 2003). The SHPO determined that Pioneer Square Historic District areaways are eligible for the NRHP. This study was incorporated in the Draft EIS (Appendix N). Since the Draft EIS, architectural historians evaluated 34 areaways within the APE that are located north of the Pioneer Square Historic District. The study identified two properties that are eligible

for the NRHP, pending concurrence from SHPO. A copy of the *Green Line Areaways Study* is included in Appendix 6.

SUMMARY OF IDENTIFIED CULTURAL RESOURCES

Archaeological and Ethnographic Resources

No recorded archaeological sites or traditional cultural places eligible for listing in the National Register of Historic Places (NRHP) are in the Seattle Monorail project area. The Sinking Ship Areaway Site (45KI685) is the only recorded archaeological site directly within project alignments. The site is probably not eligible for listing in the NRHP because it lacks integrity of condition and would not contribute information important to history. No traditional cultural places were identified in the Seattle Monorail Project through archival research or Tribal consultation.

The probability for unknown hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources varies by section of the Green Line APE. By segment, the areas include:

- **Segment 1: Ballard.** Unknown significant hunter-fisher-gatherer or ethnographic period archaeological resources may occur beneath historic fill or lacustrine sediments on the former shoreline of Salmon Bay. All station alternatives have a moderate or low probability for significant archaeological resources.
- **Segment 2: Interbay/Magnolia.** Unknown significant hunter-fisher-gatherer or ethnographic period archaeological resources may occur beneath historic fill or lacustrine sediments on the former shoreline of Salmon Bay, on the former tideflats and marsh of Smith Cove, on the former tideflats and beach of Elliott Bay, and on a low terrace at the base of bluffs fronting Elliott Bay. Historic period archaeological resources may occur on the southeast side of Smith Cove, on the former shoreline of Elliott Bay, and on a low terrace at the base of bluffs covered by contemporary Elliott Avenue W.
- **Segment 3: Queen Anne/Seattle Center/Belltown.** Alignments and stations have moderate to low probabilities for unknown significant archaeological resources except the southeast corner of Fifth and Broad near the Seattle Center, which may have unknown significant historic period archaeological resources dating between 1905 and 1917.
- **Segment 4: Downtown/Pioneer Square.** Unknown significant hunter-fisher-gatherer and ethnographic period archaeological resources may be present beneath fill in the Yesler Way and King Street vicinity. Unknown significant historic period archaeological resources may be present beneath fill in the Pike Street, Madison Street, Yesler Way, and King Street vicinities.
- **Segment 5: SODO/Chinatown International District/Pioneer Square.** Unknown significant archaeological resources may be present near King Street and on the former tideflats of Elliott Bay.
- **Segment 6: West Seattle.** Unknown significant hunter-fisher-gatherer or ethnographic period archaeological resources may occur on the former tideflats of Elliott Bay, on the

north end of Pigeon Point, and in the lower reach of the Longfellow Creek drainage. There could be unknown significant early twentieth-century historic period archaeological resources near Delridge Way.

Historical Resources

The project investigations identified resources that are 50 years of age and, in accordance with SEPA, also included consideration of any noteworthy resources over 25 years old. The APE included a field review of 728 resources. Historical resources of potential significance or historical resources that would be demolished were further assessed to determine eligibility for the NRHP, Washington Heritage Register (WHR), or listing as a Seattle City Landmark.

- The field inventory in the **Ballard Segment** identified 140 resources in the APE; subsequent research determined that **five** of the 140 resources either were listed in a historic register (i.e., NRHP, WHR, or City) or were eligible for listing.
- One hundred-two resources were identified in the APE of the **Interbay/Magnolia Segment**. **Eleven** of the resources were listed in or eligible for listing in a historic register.
- Thirty-two resources were identified in the APE of the **Queen Anne/Seattle Center/Belltown Segment**, with **nine** resources listed in or eligible for listing in a historic register.
- A total of 166 resources were identified in the **Downtown/Pioneer Square Segment**. The segment includes the Pioneer Square and Pike Place Public Market historic districts and downtown areaways. **Ninety** of the resources were listed in or eligible for historic registers.
- The field inventory in the **SODO/Chinatown International District/Pioneer Square Segment** identified 61 resources in the APE, with **three** historical resources listed in or eligible for listing in a historic register.
- The **West Seattle Segment** field inventory identified 227 resources in the APE. **Fourteen** resources were listed in or eligible for listing in a historic register.

Only those resources listed in or determined to be eligible for listing in the NRHP, WHR, or Seattle Landmarks are included in the effects and mitigation sections of this report.

EFFECTS TO CULTURAL RESOURCES

Archaeological Resources

Effects to archaeological and historical resources are listed by segment in Tables S-1 and S-2. Although no known archaeological sites are in the Green Line APE, effects to high-probability archaeological resources are listed. Project archaeologists estimated the probability for

archaeological resources on the basis of geomorphology, archival information, historic period maps, and patterns in the archaeological record of Southern Puget Sound.

Significant unknown hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources may occur in alternatives and options within segments of the Seattle Monorail Project. LAAS estimated the probability for archaeological resources based on analysis of geomorphology, archival information, historic period maps, and patterns in the archaeological record of Southern Puget Sound. Impacts to archaeological resources would be limited to locations where columns for guideways would be constructed, some areas where bridge piers may be constructed, the operations center, some stations where buildings would be removed, and/or stations where grading would penetrate fill into native soils. Construction impacts would be localized at a few of many columns for guideways or at a few of many stations. Most unknown archaeological resources that may occur in project alignments would not be affected because of the small construction footprints of columns for guideways.

Potential adverse impacts to archaeological resources are summarized by segment, alternative, option, station, and operations center in Table S-1.

Historical Resources

Table S-2 provides a summary of effects to historical resources within the APE of the Green Line. A detailed analysis of the resources evaluated is provided in the following technical report.

Table S-1			
Summary of Adverse Effects to High Probability and Known Archaeological Sites			
Alignment Alternative	Design Option	Archeological Sites	
		Known	High Probability ¹
1. Ballard			
1.1 and 1.1(s) (PA) West Side of 15th		0	2
	1.1.1 West Bridge	0	2
	1.1.2 Far West Bridge	0	2
1.2 Center of 15th/East Bridge		0	2
2. Interbay/Magnolia			
2.1 (PA) and 2.1(s) West Side of 15th/Center of Elliott		0	3
	2.1.1 West Bridge Connection	0	3
	2.1.2 Far West Bridge Connection	0	3
2.2 Center of 15th/West Side of Elliott		0	3
3. Queen Anne/Seattle Center/Belltown			
3.1 Seattle Center/Republican (PA)		0	0
	3.1.1 and 3.1.2 EMP Routes	0	0
3.2 Mercer		0	0
3.3 Thomas		0	1
3.5 Second/Denny		0	0
4. Downtown/Pioneer Square			
4.1 West Side of Second (PA)		0	3
	4.1.1 Route to Fifth and Stewart (Northwest)	0	0
	4.1.2 Route to Fifth and Stewart (Virginia)	0	0
4.2 East Side of Second with Crossover		0	3
4.3 Center of Second		0	3
4.4 East of Center of Second		0	3
5. SODO/Chinatown International District/Pioneer Square			
5.1 East Side of Third/Utah (PA)		0	2
	5.1.1 Utah Avenue	0	2
	5.1.2 First Avenue South	0	2
5.2 or 5.2 (s) West Side of Third/Utah		0	2
6. West Seattle			
6.1 and 6.1(s) West Seattle Bridge (PA)		0	3
	6.1.1 Past Pigeon Point	0	2
	6.1.2 to Pigeon Point	0	2
	6.1.3 and 6.1.4	0	0
	6.1.6 and 6.1.6(s) (PA)	0	0
6.2 New West Seattle Bridge		0	3
	6.2.1 and 6.2.2 (PA)	0	0
6.3(s) Delridge North Subsegment (PA)		0	2
6.4 and 6.4(s) Andover/Yancy Subsegment		0	3
6.5 Genesee Subsegment		0	3
Operations Facility			
C-1 Interbay		0	2
C-2 SODO		0	2

¹ There are areas with a high probability for finding either archaeological resources or hunter-fisher-gatherer sites.

Table S-2. Summary of Adverse Effects to Historic Resources

Alignment Alternative	Historic
1. Ballard	
1.1 West Side of 15th or 1.1(s) West Side of 15 th single beam	5
1.2 Center of 15 th	4
Preferred Alternative	5
2. Interbay/Magnolia	
2.1 West Side of 15 th /Center of Elliott or 2.1(s) (single beam)	8 to 9
2.2 Center of 15th/West Side of Elliott	6
Preferred Alternative	10
3. Queen Anne/Seattle Center/Belltown	
3.1 Seattle Center/Republican	5
3.2 Mercer	4
3.3 Thomas	4
3.5 Second/Denny	3
Preferred Alternative	5
4. Downtown/Pioneer Square	
4.1 West Side of Second	80 to 84
4.2 East Side of Second with Crossover	79
4.3 Center of Second	79
4.4 East Center of Second	79
Preferred Alternative	84
5. SODO/Chinatown International District/Pioneer Square	
5.1 East Side of Third/Utah	2
5.2 West Side of Third/Utah or 5.2(s) (single beam)	3
Preferred Alternative	2
6. West Seattle	
6.1 West Seattle I or 6.1(s) (single beam)	9
6.2 West Seattle II	10
6.3(s) Delridge North Subsegment	3
6.4 Andover/Yancy Subsegment	1
6.5 Genesee Subsegment	1
Preferred Alternative	11
Operations Center	
C-1 Interbay	0
C-2 SODO	0

MITIGATION MEASURES

Archaeological and Ethnographic Resources

Mitigation measures for archaeological resources would include archaeological construction monitoring in areas with a high probability for significant subsurface archaeological resources, development of an Archaeological Treatment Plan, development of an Archaeological Construction Monitoring plan, and preparation of Supplemental Treatment Plans as necessary.

Historical Resources

Table S-2 summarizes the number of adverse effects to historic resources. Mitigation will be addressed in a formal Memorandum of Agreement (MOA). The MOA will be completed and included in the Record of Decision. Several types of mitigation will be incorporated into the MOA for adversely affected resources including the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER). Specific mitigation for individual resources will be developed for inclusion in the MOA through discussions with the State Historic Preservation Officer, the City of Seattle Historic Preservation Offices, Historic Seattle Preservation and Development Authority, Pioneer Square Preservation Board, and interested parties.

If resources cannot be mitigated on-site, non-site specific mitigation is an option. Non-site specific mitigation involves finding other opportunities in the community for mitigation measures that are not specific to the affected site. Some options could include: developing educational programs, interpretive displays, creating design guidelines which focus on compatible materials, massing and scale with historical resources for the introduction of new construction (such as station design), preparing historical Multiple Property NRHP Nominations for certain neighborhoods.

PART 1

**SEATTLE MONORAIL PROJECT GREEN LINE, KING COUNTY, WASHINGTON
ARCHAEOLOGICAL RESOURCES AND
TRADITIONAL CULTURAL PLACES ASSESSMENT**

by

Dennis E. Lewarch
Gretchen Kaehler
Leonard A. Forsman
Lynn L. Larson

Submitted to:
Parametrix, Incorporated
5808 Lake Washington Blvd NE, Suite 200
Kirkland, Washington 98033

Prepared for:
Seattle Monorail Project
1904 3rd Avenue, Suite 105
Seattle, Washington 98101



Copyright ©
Larson Anthropological Archaeological Services Limited
LAAS Technical Report #2003-11
7700 Pioneer Way, Suite 101
Gig Harbor, Washington 98335-1164

March 10, 2004

ABSTRACT

The Seattle Monorail Project is proposing to construct and operate the Green Line, a 14-mile monorail line that would connect the Seattle neighborhoods of Ballard, Interbay, Queen Anne/Seattle Center, Belltown, Downtown Seattle, South Downtown (SODO), and West Seattle. The proposed project is considered a federal undertaking subject to compliance with Section 106 of the National Historic Preservation Act, because a federal permit is required from the U.S. Coast Guard. Larson Anthropological Archaeological Services Limited (LAAS) conducted an archaeological resources and traditional cultural places overview addressing hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources and traditional cultural places through archival and literature review, consultation with the Muckleshoot Indian Tribe, the Suquamish Tribe, the Tulalip Tribes, and the Duwamish Tribe, the Washington State Office of Archaeology and Historic Preservation (OAHP), and preparation of this technical report. LAAS reviewed geotechnical boring logs to estimate historic period ground disturbance and probability for unknown subsurface archaeological deposits. LAAS conducted an archaeological reconnaissance of areaways on Second Avenue S in Downtown Seattle, within the Pioneer Square Historic District.

The Sinking Ship Areaway Site (45KI685) is the only recorded archaeological site within the Seattle Monorail Project. No traditional cultural places have been identified in the project area. LAAS estimated probabilities for unknown hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources based on archival research, analysis of geology and geomorphology, and review of the extant archaeological record for Southern Puget Sound. Significant, unknown archaeological resources may occur in the Salmon Bay area of Ballard and Interbay, at the south end of the Interbay vicinity, on the tidflats and historic period shoreline of Elliott Bay in Interbay, Downtown Seattle, SODO, and West Seattle, and near early historic period streams in Interbay and West Seattle. Significant historic period archaeological materials may occur within city blocks in the Seattle Center vicinity, Downtown Seattle, and the Delridge Way vicinity.

Impacts to archaeological resources would be limited to locations where columns for guideways would be constructed, some areas where bridge piers may be constructed, the operations facility, some stations where buildings would be removed, and/or stations where grading would penetrate fill into native soils. LAAS summarized potential impacts to archaeological resources by segment, alternative, option, station, and operations facility. No significant unavoidable adverse effects to archaeological resources or traditional cultural resources would occur.

LAAS suggested measures to mitigate adverse effects to significant unknown archaeological resources. Mitigation measures are based on estimated probabilities for buried archaeological resources that may be identified during construction excavation for columns, bridge piers, stations, and the operations facility. Mitigation measures were developed to protect archaeological resources that may be present and may be significant, while minimizing construction downtime.

TABLE OF CONTENTS

Abstract	2
Table of Contents	3
List of Figures	4
List of Tables	5
Acknowledgments	6
Introduction	7
Project Description	8
Methodology	8
Tribal Consultation	9
Muckleshoot Indian Tribe	9
Suquamish Tribe	9
Tulalip Tribes	9
Duwamish Tribe	9
Affected Environment	10
Environment	10
Cultural Background	12
Previous Archaeological Studies	12
Segment 1: Ballard	16
Segment 2: Interbay/Magnolia	17
Segment 3: Queen Anne/Seattle Center/Belltown	17
Segment 4: Downtown/Pioneer Square	17
Segment 5: SODO/Chinatown International District/Pioneer Square	17
Segment 6: West Seattle	18
Traditional Cultural Property Studies	18
Ethnography/Ethnohistory	18
Segment 1: Ballard	19
Segment 2: Interbay/Magnolia	19
Segment 3: Queen Anne/Seattle Center/Belltown	20
Segment 4: Downtown/Pioneer Square	20
Segment 5: SODO/Chinatown International District/Pioneer Square	21
Segment 6: West Seattle	21
History	22
Segment 1: Ballard	22
Segment 2: Interbay/Magnolia	22
Interbay Operations Center	23
Segment 3: Queen Anne/Seattle Center/Belltown	23
Segment 4: Downtown/Pioneer Square	24
Segment 5: SODO/Chinatown International District/Pioneer Square	25
Segment 6: West Seattle	25
Review of Geotechnical Boring Logs	26
Segment 1: Ballard	27
Segment 2: Interbay/Magnolia	27
Segment 3: Queen Anne/Seattle Center/Belltown	28

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment 4: Downtown/Pioneer Square	28
Segment 5: SODO/Chinatown International District/Pioneer Square	28
Segment 6: West Seattle	28
Summary	29
Implications for Land Use and Probability for Hunter-Fisher-Gatherer, Ethnographic Period, and Historic Period Archaeological Resources and Traditional Cultural Places	29
Segment 1: Ballard	29
Segment 2: Interbay/Magnolia	29
Interbay Operations Center	30
Segment 3: Queen Anne/Seattle Center/Belltown	30
Segment 4: Downtown/Pioneer Square	30
Segment 5: SODO/Chinatown International District/Pioneer Square	31
Segment 6: West Seattle	32
Field Reconnaissance	32
Field Methods	32
Field Results	33
Identified Archaeological Resources	34
Conclusions	34
Significant Archaeological Resources	34
Impacts Analysis	35
Operation	35
Construction	35
No-Build Alternative	35
Significant Unavoidable Adverse Impacts	35
Cumulative Impacts	35
Recommendations	47
Mitigation Measures	47
Operation	47
Construction	47
Archaeological Treatment Plan	63
Archaeological Construction Monitoring Plan	64
Supplemental Treatment Plans	64
Bibliography	71
Appendix 1. Individuals and Agencies Contacted	82
Appendix 2. Tribal Correspondence	84
Appendix 3. Historic Features within the Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1884-1944)	100
Appendix 4. Washington State Office of Archaeology and Historic Preservation Cultural Resources Survey Cover Sheet	115

LIST OF FIGURES

Figure 1. Seattle Monorail Project Green Line project area	65
--	----

Figure 2. Segment 1: Ballard with ethnographic places and historic period environmental and cultural features	66
Figure 3. Segment 2: Interbay/Magnolia with ethnographic places and historic period environmental and cultural features	67
Figure 4. Segment 3: Queen Anne/Seattle Center/Belltown and Segment 4: Downtown/Pioneer Square with ethnographic places and historic period environmental and cultural features	68
Figure 5. Segment 5: SODO/Chinatown International District/Pioneer Square with ethnographic places and historic period environmental and cultural features	69
Figure 6. Segment 6: West Seattle with ethnographic places and historic period environmental and cultural features	70

LIST OF TABLES

Table 1. Previous Archaeological Investigations in the Vicinity of the Seattle Monorail Project	13
Table 2. Summary of Potential Impacts to Unknown Archaeological Resources That May Be Significant	36
Table 3. Summary of Mitigation Measures for Archaeological Resources	48

ACKNOWLEDGMENTS

We extend our thanks to the Seattle Monorail Project staff for providing rights of access and our wonderful LAAS production staff and researchers, Stephanie Trudel and Kurt Roedel for making the report production possible.

INTRODUCTION

The proposed Seattle Monorail Green Line Project (Seattle Monorail Project) is in Township 24 North, Range 3 East, Sections 13, 14, 23 and 26; Township 24 North, Range 4 East, Sections 5, 8, 7, and 18; Township 25 North, Range 3 East, Sections 1, 2, 12, 13, 14, 24, 23 and 25 and Township 25 North, Range 4 East, Sections 5, 8 7, and 18, Willamette Meridian (Figure 1). The Seattle Monorail Project proposes to construct and operate the Green Line, a 14-mile monorail line that would connect the Seattle neighborhoods of Ballard, Interbay, Queen Anne/Seattle Center, Belltown, Downtown Seattle, South Downtown (SODO), and West Seattle (Figure 1). The U.S. Coast Guard is the lead federal agency for the Seattle Monorail Project because of proposed bridge construction that would require a Coast Guard permit. The proposed project is considered a federal undertaking subject to compliance with Section 106 of the National Historic Preservation Act because a federal permit is required. Under the “Criteria of Adverse Effect” (36 CFR 800.5(1), an undertaking is an adverse effect when it may alter, directly or indirectly, “the characteristics of a property that qualify the property for listing in the National Register of Historic Places (NRHP) in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.” Archaeological resources, including hunter-fisher-gatherer, ethnographic, and historic period archaeological resources, and traditional cultural use areas, are the cultural resources under consideration in this section.

State and local laws, statutes, and ordinances also address archaeological resources that may occur in the Seattle Monorail Project. The Seattle Monorail Project is subject to the Washington State Environmental Policy Act (SEPA), which requires project proponents to describe existing historic and cultural resources that would be affected by a proposed action, analysis of impacts to the resources, and discussion of reasonable mitigation of possible impacts. Chapter 27.53 of the Revised Code of Washington prohibits individuals, corporations, and agencies to knowingly remove, alter, dig into, excavate, damage, deface, or destroy any historic or prehistoric archaeological site, without a written permit from the Washington State Department of Community Development, or their designee. The City of Seattle’s Department of Construction and Land Use Director’s Rule 2-98 requires that any proposed land use action that has excavation within 200 feet of the U.S. Government Meander Line, or in other areas where information suggests the potential for archaeologically significant resources, shall assess the probable archaeological significance of the proposed project site.

Larson Anthropological Archaeological Services Limited (LAAS) conducted an archaeological resources and traditional cultural places overview addressing hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources and traditional cultural places through archival and literature review, consultation with the Muckleshoot Indian Tribe, the Suquamish Tribe, the Tulalip Tribes, and the Duwamish Tribe, the Washington State Office of Archaeology and Historic Preservation (OAHP), and preparation of this technical report. LAAS reviewed geotechnical boring logs to estimate historic period ground disturbance and probability for unknown subsurface archaeological deposits. LAAS conducted archaeological reconnaissance of areaways on Second Avenue S within the Pioneer Square Historic District.

PROJECT DESCRIPTION

The Seattle Monorail Project identified six geographic project segments that extend from north Seattle, south, to West Seattle (Figure 1). The segments include:

- Segment 1: Ballard, extending south from NW 85th Street via 15th Avenue NW, to south of the Lake Washington Ship Canal
- Segment 2: Interbay/Magnolia, extending south of the Lake Washington Ship Canal to W Harrison Street, via 15th Avenue W and Elliott Avenue W
- Segment 3: Queen Anne/Seattle Center/Belltown, extending from W Harrison Street in southwest Queen Anne, east to the Seattle Center vicinity, and south on 5th Avenue in Belltown to Lenora Street
- Segment 4: Downtown/Pioneer Square, extending from Lenora Street south to S Jackson Street, in the King Street Station vicinity, primarily on Second Avenue
- Segment 5: SODO/Chinatown International District/Pioneer Square, extending from the King Street Station vicinity, south to S Horton Street and the SR 99 Viaduct at S Spokane Street, primarily via 3rd Avenue S
- Segment 6: West Seattle, extending west from the SR 99 Viaduct at S Spokane Street to the SW Alaska Street Junction, via SW Avalon Way, and then south to Morgan Junction in West Seattle, via California Avenue SW

Each proposed segment has alternatives for different alignment routes, options for bridges and guideway routes, and alternatives for proposed station locations. The Preferred Alternative combines alignments, stations, and switching areas from selected alignments, station locations, and options that vary by segment. The monorail would travel on guideways supported by columns and other structures throughout the project corridor, usually along existing street rights-of-way. Some station alternatives would have platforms on the same level as a guideway, and other stations would also have mezzanines below platforms. Elevated guideways and station platforms typically would be over public rights-of-way. Station buildings would provide access, ticketing or fare control, circulation, and mechanical, electrical and operational systems, and would generally require use of adjacent property. An Operations Center is proposed either in the Interbay/Magnolia Segment and could be used as a staging area for construction.

METHODOLOGY

LAAS conducted the archaeological resources and traditional cultural places overview of the Seattle Monorail Project by reviewing literature and archival data to identify recorded archaeological sites in the project area and to assess the likelihood that significant archaeological sites might be in areas of the proposed project where subsurface excavation might occur. In addition, the Seattle Monorail Project and LAAS consulted with affected Indian Tribes to obtain information on existing archaeological resources and traditional cultural places within or near the footprint of the project alternatives. LAAS reviewed archaeological site forms and archaeological survey reports on file at the Office of Archaeology and Historic Preservation and the LAAS library. LAAS also reviewed ethnographic studies, local histories and historic photographs at the University of Washington Maps Library, University of Washington Special Collections and Manuscripts, Museum of History and Industry, Seattle Public Library, Seattle

Municipal Archives Historic Photograph Online Database, and the LAAS library. LAAS consulted with the Muckleshoot Indian Tribe, the Suquamish Tribe, the Tulalip Tribes, and the Duwamish Tribe to obtain information on possible traditional cultural places within the Seattle Monorail Project. The Area of Potential Effects (APE) for archaeological resources would be the horizontal and vertical boundaries of subsurface ground disturbance from construction excavation that may affect unknown significant archaeological resources.

An archaeological survey of areaways was conducted beneath Second Avenue S, within the Pioneer Square Historic District, to determine if intact archaeological deposits occurred in the lowest story of pre-1889 buildings, several feet beneath contemporary sidewalks. LAAS recorded the Sinking Ship Areaway Site (45KI685), a historic period archaeological site on the south side of Second Avenue S in the Segment 4: Downtown/Pioneer Square of the Seattle Monorail Project.

TRIBAL CONSULTATION

The Seattle Monorail Project initiated tribal consultation for the Monorail Project Green Line by sending letters explaining the project to the chairpersons and cultural representatives of the Muckleshoot Indian Tribe, the Suquamish Tribe, the Tulalip Tribes and the Duwamish Tribe (Appendix 2). LAAS followed the letters with calls to each of the designated cultural representatives to request information about traditional cultural use of the Seattle Monorail Project.

Muckleshoot Indian Tribe

The Muckleshoot Indian Tribe concurred with LAAS' proposed assessment methodology, but had no further comments (Donna Hogerhuis, personal communication 2003).

Suquamish Tribe

Charlie Sigo (personal communication 2003), Tribal Curator, Suquamish Tribe, said that he was concerned about disturbance of unknown archaeological resources in former shoreline areas in Salmon Bay, Interbay and Pioneer Square.

Tulalip Tribes

The Tulalip Tribes (Hank Gobin, personal communication 2003) asked that we refer to a Standard Operating Procedures letter, which requests that project proponents conduct cultural resource assessments before project construction, avoid adversely affecting plant and faunal resources, and protect water and fisheries resources (Appendix 2).

Duwamish Tribe

The Duwamish Tribe (James Rasmussen, personal communication 2003) cautioned against the disturbance of archaeological resources during subsurface construction for guideway columns and construction excavation for stations, especially in Pioneer Square.

AFFECTED ENVIRONMENT

ENVIRONMENT

The Seattle Monorail Project would traverse six kinds of landforms with different ages, vegetation patterns, and probabilities for archaeological resources. Most Seattle Monorail Project alignment alternatives would be on glacial outwash drift plains that were formed approximately 16,000 years ago when the Puget Lobe of the Cordilleran Ice Sheet retreated northward at the end of the Pleistocene epoch (Galster and Laprade 1991; Porter and Swanson 1998) (Figure 1). The glacial outwash drift plains are inland from the shorelines of Salmon Bay, Smith Cove, and Elliott Bay, and generally have low probabilities for significant hunter-fisher-gatherer and ethnographic period archaeological resources. Former tidal lagoons that were extant in the early historic period, such as Salmon Bay, Smith Cove, a lagoon in the Yesler Way and S King Street vicinity, generally have high probabilities for hunter-fisher-gatherer and ethnographic period archaeological resources (Bortelson et al. 1980; Chrzastowski 1981; United States Coast and Geodetic Survey 1889). The southeast side of Smith Cove and the former tidal lagoon near Yesler Way and S King Street also may have significant, unrecorded early historic period archaeological resources. The early historic period shorelines of Elliott Bay near Smith Cove and along Elliott Avenue W, in the Yesler Way and S King Street vicinity, and near Pigeon Point and Longfellow Creek, have high probabilities for hunter-fisher-gatherer and ethnographic period archaeological resources. Historic archaeological resources also may occur along Elliott Avenue W and in the Yesler Way and S King Street vicinity. Former tideflats of Salmon Bay and Elliott Bay may have significant hunter-fisher-gatherer and ethnographic period archaeological resources beneath fill or other sediments.

Segment 1: Ballard would traverse glacial outwash drift plains from NW 85th Street south to the Ballard Bridge, via 15th Avenue NW, in the middle of the Ballard Trough, an old glacial outwash channel (Galster and Laprade 1991:Figure 6) (Figure 2). Ground surfaces in the Ballard Trough have been exposed over the past 16,000 years (Porter and Swanson 1998). During the historic period, the Ballard Trough did not have any unique environmental features, such as streams, kettle lakes, or marshes, that would have attracted early Euroamerican settlers or, prior to the historic period, hunter-fisher-gatherer or ethnographic period groups (Figure 2). Most of the Ballard Segment between 14,000 and 6,000 years ago was forest parkland, with pine and Douglas fir scattered across grasslands. Throughout the past 6,000 to 5,000 years, the glacial drift plains were covered with closed canopy forests of Western hemlock and Douglas fir (Forsman et al. 1997).

The former shoreline of Salmon Bay at the south end of the Segment 1: Ballard has the highest probability for significant hunter-fisher-gatherer and ethnographic period archaeological resources in the segment. During the early historic period, Salmon Bay was a tidal embayment, with relatively large tidal fluctuations (Chrzastowski 1981). At low tide, tideflats were exposed throughout most of the Salmon Bay embayment, and only a small stream from the outfall of Lake Union flowed through the tideflats (Chrzastowski 1981). At high tide, the tidal basin was filled and average water levels at high tide were more than 14 feet above low tide water levels (Chrzastowski 1981). The margins of the high tide zone have high probabilities for hunter-

fisher-gatherer and ethnographic period archaeological resources. Salmon Bay was inundated by Puget Sound within the past 2,500 years (Dragovich et al. 1994; Larson and Lewarch 1995). Prior to approximately 2,500 years ago, the basin was a terrestrial stream valley (Larson and Lewarch 1995). Contemporary Salmon Bay was formed in 1916 when the Hiram S. Chittenden Locks and Dam were completed and the outfall stream of Lake Union was impounded (Chrastowski 1981).

Segment 2: Interbay/Magnolia would be on the east side of an old glacial outwash channel and the historic period shoreline of Elliott Bay (Bortelson et al. 1980; Galster and Laprade 1991) (Figure 3). The south end of the outwash channel was inundated after approximately 2,500 years ago, when the surface elevation of Puget Sound rose (Dragovich et al. 1994; Larson and Lewarch 1995; Lewarch et al. 1999). The shoreline of Elliott Bay and ground surfaces in the Interbay Segment dropped or subsided at least three feet during an earthquake on the Seattle Fault Zone approximately 1,100 years ago (Bucknam 1998; Lewarch et al. 1999). Beaches that were extant ca. 1,100 years ago were inundated and bluffs were eroded. During the early historic period, the south end of Smith Cove had a curved sandspit that protected a shallow lagoon, tideflats, and a tidal marsh (Bortelson et al. 1980; United States Coast and Geodetic Survey 1889), which would have been used extensively by local Indians. The east shoreline of Elliott Bay between Smith Cove and Harrison Street was fronted by a series of bluffs in the early historic period. A narrow bench or terrace was at the base of many of the bluffs, in and adjacent to the right-of-way of contemporary Elliott Avenue W (Figure 3). Indian groups and Euroamerican settlers camped on the beach and terrace in areas that are now encompassed by Elliott Avenue W. Significant archaeological resources may occur in portions of the segment in Salmon Bay, the southeast side of Smith Cove, and on and near the former shoreline of Elliott Bay.

Most ground surfaces in the Segment 3: Queen Anne/Seattle Center/Belltown were modified as part of historic period construction and street leveling activities (Morse 1989). Alternative alignments in the segment would cross glacial outwash drift plains that were covered by a closed canopy Western hemlock-Douglas fir forest in the early historic period (Forsman et al. 1997; Lewarch et al. 1999; United States Coast and Geodetic Survey 1889). A prairie habitat in the early historic period was northeast of proposed alignments and stations, at the southwest end of Lake Union (United States Coast and Geodetic Survey 1889) (Figure 4). The prairie and shoreline at the south end of Lake Union were productive habitats that would have been utilized intensively by hunter-fisher-gatherers and ethnographic period groups.

Alternative alignments in the Segment 4: Downtown/Pioneer Square would traverse extensively modified ground surfaces of former glacial outwash drift plans. The rights-of-ways of Stewart Street, Pike Street, Pine Street, and Second Avenue were lowered several feet during regrades in the 1890s and early 1900s, which would have removed any hunter-fisher-gatherer or ethnographic period resources that may have been present (Forsman et al. 1997; Morse 1989). The south end of the segment would intersect the early historic period shoreline of Elliott Bay and a tidal lagoon in the vicinity of Yesler Way and S King Street (Bortelson et al. 1980; Hart Crowser 1999; United States Coast and Geodetic Survey 1889; Weaver 1997) (Figure 4). The shoreline and lagoon date within the past 2,500 years, and may have dropped or subsided during an earthquake on the Seattle Fault Zone approximately 1,100 years ago (Bucknam 1998). A main segment of the fault zone is directly south of S King Street. The shoreline and lagoon were

used intensively during the ethnographic period and early historic period. The shoreline and lagoon have a high probability for significant historic period, hunter-fisher-gatherer, and ethnographic period archaeological resources.

South of S King Street, the alignments in the Segment 5: SODO/Chinatown International District/Pioneer Square would cross the early historic period tideflats on the east side of Elliott Bay and near the early historic period mouth of the Duwamish River (Bortelson et al. 1980; United States Coast and Geodetic Survey 1889) (Figure 5). The area south of S Royal Brougham Way is south of a segment of the Seattle Fault Zone and was uplifted during an earthquake around 1,100 years ago (Bucknam 1998). The tideflats probably date within the last 500 years, after the bottom of the Elliott Bay embayment was uplifted and the Duwamish River delta prograded to a position near the early historic period mouth. Prior to 500 years ago, the mouth of the Duwamish River was more than 1,000 feet south of the early historic delta, and alluvial sediment from the river had not filled the embayment of Elliott Bay southeast of what is now Downtown Seattle (Dragovich et al. 1994). In 1840, the mouth of the Duwamish River was at Spokane Street (Bortelson et al. 1980). The tideflats may have significant hunter-fisher-gatherer and ethnographic period archaeological resources.

The Segment 6: West Seattle would cross former tributary channels and tideflats at the early historic period mouth of the Duwamish River, the early historic period shoreline and bluff at the north end of Pigeon Point, and the historic period mouth and lower reach of Longfellow Creek (Bortelson et al. 1980; United States Coast and Geodetic Survey 1889) (Figure 6). Tideflats at the mouth of the Duwamish River and Longfellow Creek probably date within the past 500 years, when the Duwamish River deposited alluvial sediment into the west side of the Elliott Bay embayment. The bottom of Elliott Bay, the Elliott Bay shoreline, the Duwamish River floodplain, and terrestrial surfaces of Pigeon Point and the West Seattle Peninsula along the segment were uplifted as much as 21 feet during an earthquake on the Seattle Fault Zone around 1,100 years ago (Bucknam 1998). Proposed alternative alignments southwest of Delridge Way would traverse glacial outwash drift plains on the east side and center of West Seattle Peninsula. Tideflats, uplifted terraces and shorelines, and the lower reach of Longfellow Creek have high probabilities for hunter-fisher-gatherer archaeological deposits that date within the past 2,000 years, and for ethnographic period archaeological materials.

CULTURAL BACKGROUND

PREVIOUS ARCHAEOLOGICAL STUDIES

Archaeological resources in or near the Seattle Monorail Project are summarized in 44 cultural resources reports prepared for a variety of projects through early 2003 (Table 1). No recorded archaeological sites or traditional cultural places eligible for listing in the National Register of Historic Places (NRHP) are in the Seattle Monorail Project. The probability for hunter-fisher-gatherer, ethnographic, and historic period archaeological resources that may be eligible for listing in the NRHP varies across segments of the Seattle Monorail Project.

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 1. Previous Archaeological Investigations in the Vicinity of the Seattle Monorail Project.

Author	Year	Report Title	Archaeological Resources	Evaluation Status
Campbell	1981	<i>The Duwamish No. 1 Site: A Lower Puget Sound Shell Midden</i>	Duwamish No. 1 Site (45KI23)	Listed in NRHP
Robinson	1982	<i>I-90 Seattle Access Study</i>	None	N/A
Abbott and Larson	1984	<i>Archaeological and Historical Cultural Resources Survey of The Pier 90 and 91 Terminals at Smith Cove</i>	None	N/A
Earth Technology Corporation	1984	<i>Archaeological Resources Assessment for the Downtown Seattle Transit Tunnel Project</i>	None	N/A
Kennedy	1985	<i>The METRO Renton Effluent Transfer System Findings-to-Date, West Marginal Place SW, ETS-8b/9</i>	Hunter-fisher-gatherer archaeological site 45KI52	Not Evaluated
Hart-Crowser and Associates	1986a	<i>Identification of Archaeological Research Topics and Questions for the Downtown Seattle Transit Project</i>	None	N/A
Hart-Crowser and Associates	1986b	<i>Research Design for Archaeological Test Excavations, Downtown Seattle Transit Project</i>	None	N/A
URS Corporation and BOAS, Incorporated	1987	<i>The Duwamish No. 1 Site: 1986 Data Recovery</i>	The Duwamish No. 1 Site (45KI23)	Listed in NRHP
Larson	1989	<i>Seattle Predesign Services for the Alki Transfer/CSO Facilities Project Historical/Archaeological Resources Draft Technical Memorandum</i>	None	N/A
Wessen et al.	1988	<i>U.S. Sprint Fiber Optic Cable Project Seattle, Washington, to Spokane, Washington</i>	None	N/A
Rice et al.	1989	<i>A Cultural Resources Investigation of the Port of Seattle Terminal 108 Property</i>	None	N/A
Larson and Solimano	1992	<i>Cultural Resource Assessment Port of Seattle Southwest Harbor Development Project, King County Washington</i>	None	N/A
Kreutzer	1993	<i>Archaeological Assessment of the Proposed Dry Boat Storage Facility and Aquatic Habitat Restoration Site Port of Seattle Terminal 105 Seattle, Washington</i>	None	N/A
Louis Berger and Associates, Inc.	1993	<i>Phase IA Cultural Resource Investigations of Proposed Federal Detention Center Sites King County, Washington</i>	None	N/A

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 1. Previous Archaeological Investigations in the Vicinity of the Seattle Monorail Project (continued).

Author	Year	Report Title	Archaeological Resources	Evaluation Status
Solimano et al.	1993	<i>Cultural Resource Testing 45KI432, Alki Transfer/CSO Project, West Seattle Pump Station, King County Washington</i>	45KI1432	Not eligible
Forsman et al.	1994	<i>Seattle-Tacoma Commuter Rail Project Cultural Resource Overview</i>	None	N/A
Tobin and Hart-Crowser	1994	<i>Draft Environmental Impact Statement for the Seattle Commons/South Lake Union Plan: Technical Appendix 15: Historic and Cultural Resources Study</i>	None	N/A
Robbins and Larson	1995	<i>South Spokane Street Viaduct Widening Project Cultural Resource Assessment Seattle, Washington</i>	None	N/A
Larson and Lewarch	1995	<i>The Archaeology of West Point, Seattle, Washington: 4,000 years of Hunter-Fisher-Gatherer Land Use in Southern Puget Sound</i>	West Point Site Complex (45KI428 and 45KI429)	Eligible for NRHP
Holstine	1996	<i>Historic Resources Discipline Report: Washington State Department of Transportation's Proposed SR519 Kingdome Area Intermodal Access Project, Seattle, Washington</i>	None	N/A
Shong and Larson	1997	<i>Terminal 18 Shoreline Public Access and Landscape Project Port of Seattle, Seattle, Washington Cultural Resource Assessment</i>	None	N/A
Forsman et al.	1997	<i>Denny Way/Lake Union Combined Sewer Overflow Project Seattle, King County Cultural Resources Assessment</i>	None	N/A
Weaver	1997	<i>Seattle Football Stadium EIS Cultural Resources</i>	None	N/A
Forsman et al.	1998b	<i>Wall Street project Cultural Resource Overview Seattle, King County, Washington</i>	None	N/A
Forsman et al.	1998a	<i>Lake Washington Ship Canal Cultural Resources Assessment Catalog of Known Historical Photographs Identifying Potential Archaeological Sites</i>	None	N/A
Hart Crowser, Incorporated	1998	<i>Football/Soccer Stadium and Exhibition Center Project, Appendix K: Cultural and Archaeological Resources Technical Report</i>	None	N/A
Miss	1998	<i>King Street Center Archaeological Assessment and Monitoring</i>	Foundation features and historic artifacts dating between the 1870s and 1910s	Not eligible

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 1. Previous Archaeological Investigations in the Vicinity of the Seattle Monorail Project (continued).

Author	Year	Report Title	Archaeological Resources	Evaluation Status
Lewarch and Larson	1998	<i>Update on Archaeological Test Excavations and Construction Excavation Monitoring of 45K1456, the Baba'k'ob Site, at the World Trade Center Construction Site as of March 20, 1998</i>	Baba'k'ob Site (45K1456)	Not eligible
Northwest Archaeological Associates Inc.	1998a	<i>Cultural Resources Monitoring and Discovery Plan for the King Center Property</i>	None	N/A
Northwest Archaeological Associates Inc.	1998b	<i>Cultural Resources Monitoring and Discovery Plan for the Washington State Exhibition Center and Parking Garage</i>	None	N/A
Northwest Archaeological Associates Inc.	1998c	<i>Review of Potential for Archaeological Remains on the King Street Property</i>	None	N/A
Robbins and Larson	1998	<i>Cultural Resource Monitoring Alki Transfer/CSO Facilities Project Northern Transfer Project</i>	Historic wood pilings, concrete and firebrick	Not eligible
Nelson	1998	<i>Investigation of Recent Excavation for Seismic Retrofitting at the King County Administration Building.</i>	Fill deposits with a mixture of historic artifacts and recent debris	Not eligible
Liddle	1999	<i>Results of Cultural Resource Monitoring for the World Trade Center North</i>	Historic refuse deposits and decomposing hay stratum with a range of historic period artifacts; historic archaeological site WTCN-99-01, pilings, refuse, and artifacts from warehouses dating between 1893 and 1903	Not eligible
Hart Crowser	1999	<i>Draft Cultural Resource Research Design Waterfront South Master Plan and Programmatic EIS Programs, Seattle, Washington.</i>	None	N/A
Lewarch et al.	1999	<i>Denny/Lake Union Combined Sewer Overflow Control Project Seattle, King County Archaeological Resources Treatment and Monitoring Plans</i>	None	N/A
Cooper et al.	2000	<i>Longfellow Creek Watershed Action Plan Cultural Resources Assessment and Archaeological Monitoring King County, Washington</i>	None	N/A
Forsman et al.	2000	<i>Proposed Aspen Murray Hotel/Condominium Project Archaeological and Traditional Cultural Properties Overview Seattle, King County, Washington</i>	None	N/A

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 1. Previous Archaeological Investigations in the Vicinity of the Seattle Monorail Project (continued).

Author	Year	Report Title	Archaeological Resources	Evaluation Status
Dugas and Robbins	2001	<i>Cultural Resource Monitoring for the Bellora Condominium Project, Seattle, King County, Washington</i>	Historic period refuse; unrecorded hunter-fisher-gatherer midden site adjacent to project	Not evaluated
Lewarch et al.	2002	<i>Archaeological Evaluation and Construction Excavation Monitoring at the World Trade Center, Baba 'k'ob Site (45KI456), Seattle, King County, Washington</i>	Baba 'k'ob Site (45KI456)	Not eligible
Rader		<i>Archaeological Monitoring of Exploratory Trenches Puget Creek Estuary Restoration</i>	None	N/A
Maass	2002	<i>Cultural Resources Technical Memorandum for the Atlantic Central Bus Base Expansion</i>	None	N/A
Ballantyne and Goetz	2003	<i>Draft Atlantic/Central Base Expansion Monitoring Project Protocol</i>	None	N/A
Roedel et al.	2003	<i>Alaska Way Viaduct and Seawall Replacement Project, Final Archaeological Resources and Monitoring and Review of Geotechnical Borings</i>	Historic period artifacts	

NRHP - National Register of Historic Places

N/A - Not Applicable

Segment 1: Ballard

One overview and a summary of archaeological data recovery excavations at West Point provided information regarding archaeological resources that may occur in the Ballard Segment. Forsman et al. (1998a) provided an overview of archaeological and ethnographic resources in the Salmon Bay vicinity as part of a study of the Lake Washington Ship Canal. Larson and Lewarch (1995) summarized extensive archaeological excavation data sets from the West Point Site Complex (45KI428, 45KI429), on the northwest tip of Discovery Park, and ethnographic and environmental information for the Salmon Bay vicinity. The archaeological record at West Point documents changing land use patterns over the past 4,500 years, due to a combination of rising sea level elevation, changes in the configuration of the West Point landform, regional changes in hunter-fisher-gatherer subsistence-settlement pattern organization, and effects of an earthquake on the Seattle Fault Zone, approximately 1,100 years ago. The physical setting of the West Point Site Complex (45KI428, 45KI429) shares many elements of the geomorphology of the shoreline and bluff landforms throughout the Seattle Monorail Project.

Previous cultural resource investigations in and near Segment 1: Ballard indicate the former shoreline of Salmon Bay has a high probability for significant hunter-fisher-gatherer and ethnographic period archaeological resources.

Segment 2: Interbay/Magnolia

Five overviews or archaeological treatment plans summarized hunter-fisher-gatherer, ethnographic data, and historic information relevant to archaeological resources that may occur in Segment 2: Interbay/Magnolia (Abbott and Larson 1984; Forsman et al. 1997, 1998a; Larson 1989; Lewarch et al. 1999). Investigations at the West Point Site Complex (45KI428, 45KI429) provided information on hunter-fisher-gatherer adaptations over the past 4,200 years on Shilshole Bay, and sea level rise and changes in the environment and position of the marine shoreline in Salmon Bay and Smith Cove (Larson and Lewarch 1995).

The former shorelines of Salmon Bay, Smith Cove, and Elliott Bay may have significant hunter-fisher-gatherer and ethnographic period archaeological resources. Historic period archaeological materials may be present along the former shoreline and bluff line of Elliott Bay.

Segment 3: Queen Anne/Seattle Center/Belltown

Ten overviews, reports from archaeological construction monitoring projects, or summaries of archaeological test excavation projects provided information to estimate probabilities for archaeological resources in the Seattle Center vicinity (Dugas and Robbins 2001; Forsman et al. 1997; Lewarch and Larson 1998; Lewarch et al. 1999, 2002; Liddle 1999; Tobin and Hart-Crowser 1994; Wessen et al. 1988). Alignment alternatives in Segment 3: Queen Anne/Seattle Center/Belltown would traverse areas that have been disturbed by construction and that have a low probability for significant archaeological resources.

Segment 4: Downtown/Pioneer Square

Probabilities for archaeological resources in Segment 4: Downtown/Pioneer Square were estimated from 21 cultural resource investigations that were conducted in or near the segment (Earth Technology Corporation 1984; Forsman et al. 1994, 1997, 1998b, 2000; Hart Crowser 1999; Hart-Crowser and Associates 1986a, 1986b; Lewarch et al. 1999, 2002; Liddle 1999; Miss 1998; Nelson 1998; Northwest Archaeological Associates, Inc. 1998a, 1998c; Robinson 1982; Roedel et al. 2003; Tobin and Hart-Crowser 1994; Weaver 1997). Data from the West Point Site Complex (45KI428, 45KI429) (Larson and Lewarch 1995) and the Duwamish No. 1 Site (45KI23) (Campbell 1981; URS Corporation and BOAS, Incorporated 1987) were extrapolated to estimate the probability for hunter-fisher-gatherer archaeological materials. The south end of the segment in the Yesler Way and S King Street vicinity has a high probability for archaeological resources.

Segment 5: SODO/Chinatown International District/Pioneer Square

Reports from 20 cultural resource investigations provided background to estimate probabilities for archaeological resources in Segment 5: SODO/Chinatown International District/Pioneer Square, including overviews, reports of archaeological construction monitoring projects, and summaries of archaeological test excavations (Ballantyne and Goetz 2003; Earth Technology Corporation 1984; Forsman et al. 1994; Hart Crowser 1999; Hart-Crowser and Associates 1986a, 1986b; Hart Crowser, Incorporated 1998; Holstine 1996; Lewarch et al. 2002; Louis Berger and Associates, Inc. 1993; Maass 2002; Miss 1998; Northwest Archaeological Associates, Inc. 1998a, 1998b, 1998c; Robinson 1982; Roedel et al. 2003; Weaver 1997). Inferences regarding the effects of sea level rise, changes in hunter-fisher-gatherer land use patterns, and effects of earthquakes were drawn from archaeological investigations at the West Point Site Complex

(45KI428, 45KI429) (Larson and Lewarch 1995) and the Duwamish No. 1 Site (45KI23) (Campbell 1981; URS Corporation and BOAS, Incorporated 1987).

Segment 6: West Seattle

Eleven cultural resource investigations in and adjacent to Segment 6: West Seattle provided a background to estimate probabilities for archaeological resources. Archaeological reports included overviews, data from archaeological test excavation projects, information from archaeological surveys, and results of archaeological construction monitoring (Cooper et al. 2000; Kennedy 1985; Kreutzer 1993; Larson 1989, 1992; Larson and Solimano 1993; Rader n.d.; Rice et al. 1989; Robbins and Larson 1995, 1998; Shong and Larson 1997). Data from the Duwamish No. 1 Site (45KI23) documented occupations on a stream terrace at the margin of Elliott Bay and old channel of the Duwamish River over the past 2,000 years (Campbell 1981; URS Corporation and BOAS, Incorporated 1987). The terrace was uplifted approximately 20 feet during an earthquake on the Seattle Fault Zone 1,100 years ago. The prograding delta of the Duwamish River reached the vicinity of the Duwamish No. 1 Site (45KI23) between 500 and 1,000 years ago, and the local habitat changed from a marine littoral setting to a river delta and riverbank riparian environment.

Tideflats, uplifted and early historic period shorelines of Elliott Bay, and the mouths and lower reaches of the Duwamish River and Longfellow Creek have high probabilities for hunter-fisher-gatherer and ethnographic period archaeological materials.

TRADITIONAL CULTURAL PROPERTY STUDIES

One traditional cultural property study was conducted within the Seattle Monorail Project. Larson and Forsman (1996) summarized archival data and conducted informant interviews as part of a traditional cultural property study for the Alki Transfer/CSO Facilities Project. The Northern Transfer Segment of the Alki Transfer/CSO Facilities Project included a project alignment from Alki Point in West Seattle, east via Spokane Street, to the SODO vicinity, within the Segment 5: SODO/Chinatown International District/Pioneer Square and Segment 6: West Seattle of the Seattle Monorail Project. Tribal informants did not identify any traditional cultural properties in West Seattle or SODO (Larson and Forsman 1996). However, in an archival component of the Alki Transfer/CSO Facilities Project traditional cultural property study, Forsman (1994) noted references in archival materials to an Indian burial ground near Alki Point in West Seattle and use of the shoreline at Alki Point by the Duwamish as a location for vision quests.

ETHNOGRAPHY/ETHNOHISTORY

The Seattle Monorail Project is in the aboriginal territory of the Duwamish, a Puget Salish or Lushootseed-speaking group that lived in winter villages on the shores of Elliott Bay, Lake Washington, Lake Union, and Salmon Bay, and on the banks of the Duwamish, Black, and Cedar Rivers (Petite 1954; Stevens 1854; United States Court of Claims 1927a, 1927b; Waterman ca. 1920, 1922). The Seattle Monorail Project overlays or is adjacent to several Duwamish ethnographic places, including Salmon Bay, Smith Cove, Elliott Bay, and the Duwamish River. These areas were used for establishing winter houses, for erecting seasonal camps during fishing,

hunting and plant gathering efforts, building sweat lodges, erecting aerial duck nets, and other activities related to subsistence and shelter. The Green River and White River people, now known as the Muckleshoot, and the Suquamish, were neighbors of the Duwamish (Lane 1987:3). The United States did not provide a reservation for the Duwamish in the 1855 Treaty of Point Elliott, and many of the Duwamish moved to other reservations, including the Port Madison Indian Reservation at Suquamish, the Muckleshoot Indian Reservation near Auburn, and the Tulalip Indian Reservation northwest of Everett. Many Duwamish descendants are members of the contemporary Suquamish Tribe, the Muckleshoot Indian Tribe, and the Tulalip Tribes. Other Duwamish descendants are members of the Duwamish Tribe, which was denied federal recognition in 2001.

SEGMENT 1: BALLARD

Salmon Bay was a saltwater inlet of Puget Sound known to the Duwamish as SilSul, meaning “shoving a thread through a bead” (Waterman ca. 1920:136-137) (Figure 2). The people living on Salmon Bay were a Duwamish-affiliated band known as the Shilsholamish, meaning “dwellers on Shilshole” (Waterman 1922:187). Waterman (ca. 1920:136-137) placed the village on the north shore of Salmon Bay, in the “present Ballard district of Seattle.” In a subsequent publication, Waterman (1922:179) indicated the village was near the present Ballard Bridge, adjacent to or within the Ballard Segment. Archaeological deposits exposed during construction of the Ballard Locks, approximately one mile west of Segment 1: Ballard, also may have been part of this or another early historic period village (Forsman et al. 1998a:2-3) (Figure 2). The Duwamish traveled east from Salmon Bay to enter Lake Washington from Puget Sound, through a series of portages between Lake Union and Union Bay that now connect the Lake Washington Ship Canal and the Montlake Cut (Waterman ca. 1920:136-137). Approximately one dozen families lived on Salmon Bay in the early 1850s, a remnant of a larger group that formerly occupied Smith Cove, Lake Union, and “points north” (Costello 1974 [1895]:86-87). Their numbers were greatly reduced by attacks from Indian raiders from Alaska and British Columbia. Salmon Bay Charlie, a Shilsholamish, supplied early Ballard residents with fresh seafood (Thompson 1998:14-15). Salmon Bay Charlie’s house was more than one mile west of the Seattle Monorail Project.

The Shilsholamish applied names to creeks and other points in Salmon Bay. Near the Seattle Monorail Project, they named a creek betetdaq, meaning “a kind of supernatural power,” 0.2 miles east of Segment 1: Ballard (Hilbert et al. 2001:59; Waterman 1922:187) (Figure 2).

SEGMENT 2: INTERBAY/MAGNOLIA

The north end of Segment 2: Interbay/Magnolia adjacent to Salmon Bay was known aboriginally as SilSul (Hilbert et al. 2001:58; Waterman 1922:179, 187). See Segment 1: Ballard for a discussion of the village. There are no recorded winter villages on Smith Cove, although Smith Cove was undoubtedly used by the Shilsholamish for fishing and clam digging. The aboriginal name of a small creek draining into the east side of Smith Cove was sʔileRucid, which means “talking” (Waterman 1922:189) (Figure 3). Segment 2: Interbay/Magnolia would cross the upper reach of the creek, which has been channelized near the Interbay Golf Course. A second creek on the east shore of Elliott Bay was known as teqep, meaning “an aerial net for

snaring ducks” (Hilbert et al. 2001:63; Waterman 1922:188) (Figure 3). The Indians beat the reeds and water at the south end of Lake Union, scaring waterfowl, and causing the birds to fly west, between Queen Anne Hill and Denny Hill. The natural flight corridor led to the mouth of the creek that flowed through present Elliott Bay Park and Kinnear Park. Indians set vertical poles that were connected by netting, ensnaring the birds. The net was near the creek mouth, also an area where the Duwamish established temporary camps (Waterman 1922:188).

SEGMENT 3: QUEEN ANNE/SEATTLE CENTER/BELLTOWN

A prairie northeast of the Seattle Center was known to the Duwamish as babaLab, meaning “prairies” (Hilbert et al. 2001:164; Waterman 1922:188) (Figures 3 and 4). Waterman (1922:188) did not record a village at babaLab, however, others described a village at or near the babaLab prairie (Bass 1937:90; Petite 1954). The exact location of the village is not documented in the ethnographic and historic literature, however, a treeless opening on the United States Coast and Geodetic Survey (1889) map may represent the early historic period prairie. Historians and Indian informants variously described babak^wab as a winter village with two houses (Bass 1937:90; Petite 1954; United States Court of Claims 1927a) and as a historic Indian settlement with cabins of milled lumber (Costello 1974 [1895]:x-xi). Petite (1954) placed the babak^wab winter houses at a clearing in the forest in the “Bell Street neighborhood.” Waterman (1922:188) noted that the babak^wab place name referred to an “open space, or series of spaces, in the forest north of what is now the business district of Seattle,” mapping babak^wab east of the Seattle Center complex (Figure 4). The babak^wab village described by Petite (1954) and Bass (1937:90) may have been within the forest opening mapped by Waterman (1922:179, 188) and the United States Coast and Geodetic Survey (1889) (Figure 4) or within one of the “series” of openings described by Waterman (1922:188). Pre-contact and treaty era (1855) villages and/or seasonal camps were probably within the early historic prairie near the Seattle Center. Historic references to a Duwamish settlement near the beach below Belltown (Costello 1974 [1895]:x) suggest that the “series of spaces” described by Waterman (1922:178) may have extended west toward the shoreline of Elliott Bay. An Indian trail, known as Va?Ised, connected Lake Union, the babak^wab prairie, and Elliott Bay (United States Surveyor General 1856; Waterman 1922:192) (Figure 4), crossing the grounds of the contemporary Seattle Center complex.

SEGMENT 4: DOWNTOWN/PIONEER SQUARE

Duwamish settlement and camping areas were on the bluff tops that once fronted the Elliott Bay shoreline, west of Segment 4: Downtown/Pioneer Square, and on a peninsula at the early historic period shoreline of Elliott Bay, in the contemporary Pioneer Square District (Figure 4). A campsite called bo’lots stretched “way back” from the shoreline between Pike and University Streets, and referred to springs in the area (Harrington ca. 1909:0340, 0406) (Figure 4). The Duwamish had burial areas on the tops of bluffs above the early historic period shoreline of Elliott Bay, one block west of Segment 4: Downtown/Pioneer Square (Figure 4). One of the burial areas was at the west end of Seneca Street, at the intersection with First Avenue, before the grade of First Avenue was lowered (Watt 1931:58-59) (Figure 4). Other Indian burials were near what is now the intersection of First Avenue and Marion Street (Costello 1974 [1895]:122) and near the contemporary intersection of First Avenue and Spring Street (Denny 1909:140-141), west of the proposed alignment (Figure 4).

D^ziDelaliV was an early historic period village with eight winter houses on a small peninsula of land that was in the contemporary Pioneer Square District (Figure 4). D^ziDelaliV was also the place name for the shoreline, the small peninsula, a small tidal lagoon, and areas east of the tidal lagoon, in what is now the Pioneer Square District (Hilbert et al. 2001:64; United States Court of Claims 1927a; Waterman 1922:179, 188). The DiDelaliV village was approximately 450 feet west of the Downtown Segment, which would cross the north and east edges of the former tidal lagoon (Phelps 1978:5) (Figure 4), a “good place” to harvest flounders (Waterman 1922:188). Watt (1931:65) described the ruins of an Indian hut south of a stream that is now filled by the right-of-way of Yesler Way (Figure 4). The Indian house may have been associated with the DiDelaliV village. Crow (1926) described a dance house near First Avenue S and S King Street that was at the former location of the DiDelaliV village and appears to have been associated with the DiDelaliV village. The Duwamish conducted ceremonial activities in the dance house (Crow 1926) (Figure 4).

SEGMENT 5: SODO/CHINATOWN INTERNATIONAL DISTRICT/PIONEER SQUARE

Segment 5: SODO/Chinatown International District/Pioneer Square includes the south end of the historic period tidal lagoon and shoreline of Elliott Bay, including portions of d^ziDelaliV, the ethnographic place name used for the village shoreline, the small peninsula, a small tidal lagoon, and areas east of the tidal lagoon (Hilbert et al. 2001:64; United States Court of Claims 1927a; Waterman 1922:179, 188) (Figure 5). The mouth of the Duwamish River was used by the Duwamish and neighboring groups, including the Suquamish and Green River/White River (now Muckleshoot) groups, for fishing salmon and gathering shellfish (Bagley 1929:654-656; Lane 1974:12, 1987:1-3, 9-12).

SEGMENT 6: WEST SEATTLE

Three ethnographic places with recorded Duwamish place names are near Segment 6: West Seattle, at the early historic period mouth of the Duwamish River (Figure 6). A marsh island, now part of the mainland east of Harbor Island, was known as Zeqas, meaning “muddy” (Waterman 1922:179, 188) (Figure 6). The Duwamish called the river channel east of the marsh island xeq?, meaning “slough” (Waterman 1922:179, 188) (Figure 6). A village on the east side of Pigeon Point, near a former tributary channel of the Duwamish river, was Tu?elal?tx, meaning “where herrings live” or “herring’s house” and was approximately 500 feet south of Segment 6: West Seattle (Waterman ca. 1920:137, 1922:179) (Figure 6).

The western portion of Segment 6: West Seattle would cross three areas with Duwamish place names. Segment 6: West Seattle would intersect the mouth of Longfellow Creek, which was known as tua’wi, meaning “trout” (Waterman 1922:179, 188) (Figure 6). The Duwamish carved petroglyphs on a large rock, no longer extant, near the mouth of Longfellow Creek (Smith 1989). A creek west of Edmunds Street was known as Tesbid, meaning “winter house” (Waterman 1922:179, 189) or “cold weather place” (Hilbert et al. 2001:70) (Figure 6). A creek west of Fauntleroy Way was known as Gal, meaning “to capsize” (Waterman 1922:179, 189) (Figure 6).

HISTORY

LAAS used archival information and local histories to develop summaries of historic period land use in each segment. Appendix 3 lists structures and other historic features within city blocks where alignment alternatives, stations, or operations facilities may be located. The historic period features appeared on Sanborn insurance maps between 1884 and 1944.

SEGMENT 1: BALLARD

Ira W. Utter and Osborn Hall were two of the first Euroamericans to settle in Ballard, in 1854. The two men patented claims adjacent to each other on the north side of Salmon Bay (United States Surveyor General 1863). Hall sold his claim to Utter within a year. Utter's land is bounded by what is presently NW 56th Street to the north, to the south by Salmon Bay and on the west by 20th Avenue NW. Despite having lost his home and goods in the Indian Wars of 1855 to 1856, Utter rebuilt and by 1870, he possessed the most extensive holdings in Salmon Bay. Utter's land bordered on that of B.A. Pierce's to the east. The General Land Office map (United States Surveyor General 1856) shows that both Pierce and Utter had structures on the land by 1856. Before 1880, the area traversed by the Ballard Segment was densely forested (Wandrey 1975:25). Intensive logging began in 1877 and sawmills and other lumber processing concerns began to appear (Reinartz 1998:19).

Sanborn maps show historic land use in Segment 1: Ballard transitioned from residential to commercial activities between late 1910 and the middle 1930s (Sanborn Map and Publishing Company 1884, Sanborn Map Company 1917, 1936, 1944) (Appendix 3). The change in land use probably reflected the growing availability and popularity of the gasoline automobile and the shift of settlement from Ballard to desirable residential areas south of Ballard.

Analyses of historic Sanborn maps between 1884 and 1944 show that the area had begun to industrialize by the late 1800s (Sanborn Map and Publishing Company 1884; Sanborn Map Company 1888, 1905, 1917, 1930, 1936, 1944; Sanborn Perris Map Company 1893) (Appendix 3). Businesses and structures in areas where the alignment would cross city blocks included dwellings, gas stations, auto wrecking yards oil tanks, shingle manufacturing companies and bunkhouses for the employees of the R.P. Bodle Fruit and Vegetable Company (Figure 2). Areas of proposed stations from 15th Avenue NW and NW 85th Street to the Ship Canal were almost exclusively dedicated to automobile use and maintenance after the first decade of the 1900s. A few residential dwellings were scattered among gas stations and garages, and one store is shown in 1917 (Sanborn Map Company 1917) near the intersection of 15th Avenue NW and NW Market Street.

SEGMENT 2: INTERBAY/MAGNOLIA

One of the earlier settlers of the area was Dr. H.A. Smith (United States Surveyor General 1856) who patented and settled a claim in 1853 in what became Smith Cove. Smith built a log cabin and distinguished himself in a number of ways, including the famous translation of Chief Seattle's famous speech (Bagley 1929:114). Smith's land claim was bordered by that of J. Ross and W.A. Strickley to the east and E. M. Smithers to the south. Segment 2: Interbay/Magnolia would cross land composed primarily of tideflats, not extensively utilized or settled until the

early first decade of the 1900s, when the Port of Seattle began filling approximately 150 acres of tideflats in the area of Smith Cove. The tideflats were not part of early Donation Land Claims, and were filled between 1915 and 1919 (Phelps 1978:210).

Segment 2: Interbay/Magnolia project area was a commercial and industrial district by the early 1900s. The area continued to be developed commercially as the Great Northern Railroad brought both goods and passengers into the area. The land that skirted the rail lines also began to be industrialized in the early 1900s. In 1917, industries in the segment included a shingle mill, cabinet makers, and a cannery (Sanborn Map Company 1917) (Figure 3).

Interbay Operations Center

Sanborn maps for 1930 and 1944 show the area of an Operations Center to be the site of residential dwellings, a mattress factory and oil storage (Sanborn Map Company 1930, 1944).

SEGMENT 3: QUEEN ANNE/SEATTLE CENTER/BELLTOWN

The first Euroamericans to arrive in the vicinity of Segment 3: Queen Anne/Seattle Center/Belltown were Arthur and David Denny and William Bell. The two Denny brothers and Bell established claims adjacent to one another in the area that is presently Downtown Seattle (United States Surveyor General 1863). In 1852, the three staked their claims only after ascertaining that the land bordered on a prime harbor location. Arthur Denny had surveyed the waterline, taking soundings with horseshoes tied to a clothesline, and deemed the eastern side of Elliott Bay to be hospitable for shipping (Watt 1931:62). The land claims of the three men encompassed the area from Belltown north to Queen Anne Hill (United States Surveyor General 1863). The land was cleared for homesteads and farms, and stands of virgin timber were cut for building and also to trade for supplies brought by the lumber schooners (Denny 1909:61; Watt 1931: 70-71).

Denny Hill and streets north of the Downtown core in Segment 3: Queen Anne/Seattle Center/Belltown were leveled through a series of regrades between the early 1890s and the early 1930s (Figure 4). Denny Hill had spanned some 60 blocks from First Avenue to Pike Street, however, the hill not only prevented the Belltown commercial district from expanding northward, but essentially isolated Belltown from the rest of Seattle. The hill was removed through a massive public works effort that utilized water and high pressure hoses to erode the hill and channel the debris into Elliott Bay through the use of timber trestle flumes (Dorpat and McCoy:169-170). Major business growth in the area did not take place, however, until after the end of World War II.

In addition to the Denny Hill regrade, the Belltown area was extensively modified between 1888 and 1891, through filling wetlands and tidelands. The increase in usable land allowed the establishment of various commercial enterprises in Belltown including a lumber siding mill, meatpacking plants, storage facilities and hay-pressing plants (Appendix 3).

SEGMENT 4: DOWNTOWN/PIONEER SQUARE

The first Euroamericans to occupy the area were the members of the Denny party who had first settled on Alki Point but moved across Elliott Bay from the West Seattle Peninsula in search of a better shipping harbor. Doc Maynard settled a claim in what is now Pioneer Square. Maynard had not traveled with the original Denny party, but established the first store, the Seattle Exchange and a blacksmith's shop (Bass 1937:23-24). Henry Yesler appeared in 1852 and built the first sawmill in 1853 at the foot of what is now Yesler Way.

Early settlers cleared and logged their land and traded surplus timber and timber products to the lumber schooners that brought supplies. Later, after Yesler had established his mill, the settlers sold their logs to him to be processed into milled timber. A roadbed was excavated from Yesler's Mill to Thomas Mercer's land claim. Mercer owned the only horse team in the area at that time and they were used to haul logs and lumber to and from the mill. The road generally followed the alignment of what is now First Avenue north to Broad Street.

The Indian Wars of 1855 and 1856 slowed the settlement and growth in the area. One of the major battles of the war was fought in the Pioneer Square District on January 26, 1856 (Watt 1931:239). The city soon rebounded after the end of the Indian War and settlers again began to make their way into the area. A railroad system was established along the waterfront in the 1880s, called the Seattle and Walla Walla railroad that established a direct link between the coal mines in Renton and Lake Washington and the coal storage bunkers on the waterfront south of Yesler Way (Roedel et al. 2003:17). The establishment of the railroad system bolstered the economy of early Seattle and the Pioneer Square District. The waterfront district also grew commercially during this time.

One event that shaped much of the downtown area more than any other was the Great Seattle Fire of 1889 (Figure 4). The fire started in a cabinetmaker's shop at First Avenue and Madison Street in the late afternoon. In the three minutes it took to sound the alarm, the entire building was in flames. The flames quickly spread to the next block and before long had consumed 58 blocks of commercial concerns, railroad tracks, warehouses and shipping docks in downtown Seattle (Austin and Scott 1938:41-43). Almost immediately after the conflagration had died down, business owners began rebuilding and replacing the wooden structures with less flammable brick. The area quickly regained its place as a business and light industrial use area and was bustling with furniture stores, groceries, apartment buildings and hotels by the middle 1900s (Appendix 3).

The Pioneer Square Historic District at the south end of Segment 4: Downtown/Pioneer Square has architectural features that stem from the reconstruction after the Great Fire of 1889 (Figure 4). After the fire, the lowest floor of structures that had burned was covered, and new streets and sidewalks were constructed at a higher elevation than before the fire. The new sidewalks were built at the top of the former first story of burned buildings. Building owners had easements for the areas beneath the new sidewalks, and used the areas for a variety of purposes. The City of Seattle uses the term "areaway" to describe the extant areas beneath contemporary sidewalks in Pioneer Square Historic District (Lewarch and Kaehler 2003). These areaways may contain archaeological deposits postdating the 1889 fire.

SEGMENT 5: SODO/CHINATOWN INTERNATIONAL DISTRICT/PIONEER SQUARE

Members of the Denny Party including D.S. Maynard and Carson Boren were among the first Euroamericans to settle in Segment 5: SODO/Chinatown International District/Pioneer Square, establishing homes and businesses.

Early businesses along the waterfront were based on processing and shipping lumber and lumber products. Wharves, sawmills, and railroad trestles were among the earliest structures in the area (Sanborn Map Company 1888) (Figure 5). The Great Seattle Fire of 1889 demolished a portion of the waterfront, 18 city blocks in all, from Fourth Avenue, west and south to the water's edge (Figure 5). The fire, although devastating, allowed for the expansion of businesses north into Belltown and south into the Elliott Bay tideflats, which essentially opened the waterfront district that had once been enclosed by wharves and docks.

After a protracted battle over railroad alignments, bridges and grade separations, and arbitration between the Northern Pacific and Great Northern Railroads, the Great Northern Railroad line was established. Northern Pacific and Great Northern Railroads shared rows of tracks along Railroad Avenue, now Alaskan Way. Although competition between the two railroad companies made for “a daily ballet of hazardous switching” along Railroad Avenue, the establishment of railroad lines provided impetus for the rebuilding and growth of the waterfront area (Dorpat and McCoy 1998:159). By the early 1900s, the area had developed into a commercial and industrial district that contained planked piers, elevated roadways and walkways, piers and small businesses and large-scale industries (Appendix 3). Small businesses included bakeries and groceries while large-scale industries included iron foundries, textile mills, brick and mining companies, plants, canneries, mattress and upholstery companies.

SEGMENT 6: WEST SEATTLE

David Denny, Lee Terry, and John Low were some of the first and most prominent settlers in West Seattle. Initial efforts to develop the area focused on the lumber industry. An attempt was made to establish a mill site including a brickyard and farm at Alki Point (*West Seattle Herald* 1987:6). While the efforts did not immediately pan out, a mill site was finally established at Freeport on the east side of Duwamish Head at the north end of the West Seattle Peninsula, along with a shipyard and cannery (Cooper et al. 2000:17). By 1894, a flour mill and grain elevator operated on the edge of Elliott Bay, southwest of the town of West Seattle (*West Seattle Herald* 1987:23).

The area became a boomtown of real estate and was seen as a desirable option to the rapidly urbanizing setting of downtown Seattle. Developers purchased and platted tracts for public sale in the early 1890s but were thwarted in their plans by the lack of reliable transportation from Downtown Seattle. The ferry service established in 1877 between Freeport and Downtown Seattle was unreliable and the need for a form of reliable transportation to entice investors induced the development of a streetcar service in 1890. The financial crash of 1893 insured that the newly developed street car system would remain as erratic as the ferry system encouraging residents of West Seattle to incorporate in 1902. In 1904, West Seattle was also home to an electric streetcar line.

The Pacific Steel Mill began operating a steel mill at Young's Cove by 1905, filling the tideflats in the area to allow for mill expansion (Appendix 3). The growth of the mill produced collateral growth in the community, which soon took on the appearance of a classic mill town with company housing for workers and their families, saloons, stores, a hotel and real estate office. Continued improvements in transportation between Seattle and West Seattle encouraged urbanization and growth in West Seattle and the adjoining Youngstown and encouraged city officials to provide better local services as well as recreational facilities (Figure 6). The City of Seattle purchased the Puget Mill site south of Genesee Street in 1938, and developed recreational facilities including a golf course, stadium, and youth camp (Cooper et al 2000:18).

From the early 1900s onward, businesses in the area were mostly industrial or manufacturing in service. The early twentieth century use of the project area near the West Seattle Bridge to approximately Alaska Street, was mostly light industrial in nature, with some small businesses and dwellings interspersed (Appendix 3).

REVIEW OF GEOTECHNICAL BORING LOGS

LAAS reviewed 49 unpublished logs of geotechnical borings excavated for the Seattle Monorail Project, 61 unpublished geotechnical boring logs held in-house by LAAS, unpublished geotechnical data from construction excavation projects held in house by LAAS, and relevant geotechnical data in cultural resource management reports in the Seattle Monorail Project vicinity. Analyses of geotechnical data had two primary goals: 1) to document the trends in environmental data to estimate the likelihood for archaeological deposits, and 2) to identify locations where intact archaeological deposits may be present within the Seattle Monorail Project.

LAAS assessed descriptions of historic fill (Hf) contents, beach deposits along the present and former shoreline of Elliott Bay and the Duwamish River mouth (Hb), and estuary deposits of the ancestral Duwamish River (He). Historic fill deposits (Hf) on the tideflats and shoreline of Elliott Bay may have intact refuse from historic buildings that appear on historic period maps or may have historic debris from the Great Seattle Fire of 1889. If intact refuse and fill deposits can be associated with specific historic buildings or with events or patterns of development important in the history of the City of Seattle, the historic deposits may be significant (Lewarch et al. 1999). Previous archaeological overviews of Downtown Seattle indicated that intact refuse and fill deposits might be significant (Earth Technology Corporation 1984; Forsman et al. 1997; Hart Crowser 1999; Hart-Crowser and Associates 1986a, 1986b; Lewarch et al. 1999).

Old beach deposits (Hb), especially stratigraphic units with abundant laminated shell and organic material, may have hunter-fisher-gatherer shell midden deposits that were inundated by rising sea level or submerged as a result of earthquakes. Project alignments between S King Street and Smith Cove are on the north edge of the Seattle Fault Zone (Forsman et al. 1997). Elliott Bay beaches north of the Seattle Fault Zone dropped more than three feet (0.9 meters) in elevation during an earthquake on the fault approximately 1,100 years ago (Forsman et al. 1997; Lewarch et al. 1999). Nearshore currents and waves typically eroded bluffs on the edge of Elliott Bay, but beaches at the base of the bluffs were re-established within a few hundred years of this earthquake. Beach deposits identified in boring logs below estuary sediments or beach

sediments, however, may be remnants of beaches that were exposed prior to the 1,100 year-old earthquake and subsequently subsided. Hunter-fisher-gatherers probably used the old beaches before the earthquake on the Seattle Fault Zone and intact archaeological deposits may be within the geological units identified as old beaches. Historic period beaches that were used by historic Indian groups and Euroamericans were later covered with fill from construction regrading and other construction projects. The fill may have capped surfaces with intact archaeological deposits that were left by historic period Indian groups or Euroamericans. The presence of historic period beaches can be inferred from the spatial location of borings relative to the early historic period shoreline and by historic period fill deposits in direct contact with beach deposits. LAAS interpreted stratigraphic superposition relationships where historic fill was directly on top of a beach surface to indicate the beach was exposed during the historic period.

Interest in estuary deposits (He) is derived from the similarity of the matrix descriptions of estuary deposits in geotechnical boring logs and old, inundated tidal marsh sediments identified elsewhere on the shoreline of Elliott Bay. Tidal marsh landforms have a high probability for hunter-fisher-gatherer archaeological deposits, based on archaeological site distribution patterns throughout Puget Sound. Matrices identified as estuary deposits in the boring logs in the project area have a high probability for hunter-fisher-gatherer archaeological deposits, because they were on old shorelines of Elliott Bay and may have had tidal marshes similar to marshes identified in other areas on the old Elliott Bay shoreline. As noted above, tidal marshes have a high probability for hunter-fisher-gatherer archaeological deposits.

Segment 1: Ballard

Ten geotechnical boring logs excavated along 15th Avenue NW for the Seattle Monorail Project indicate most alternative alignments north of historic period Salmon Bay do not have historic fill deposits. The roadbed of 15th Avenue NW was leveled and prepared directly on glacial till deposits. Drillers removed the upper four to five feet of some borings with an industrial vacuum apparatus prior to drilling soil samples. However, the pattern of geotechnical borings with complete stratigraphic columns corroborates patterns in the few borings had the upper few feet removed.

Segment 2: Interbay/Magnolia

Nineteen geotechnical borings excavated in Segment 2: Interbay/Magnolia include samples in the W Dravus Street vicinity, on 15th Avenue W, and on Elliott Avenue W. Three geotechnical borings near W Dravus Street document historic period fill ranging in depth between one and 14 feet, placed on glacial outwash deposits and landslide debris. Six geotechnical borings on Elliott Avenue W between W Lee Street and Harrison Street document historic period fill ranging in depth between 12 feet and 22 feet below the contemporary ground surface. Fill deposits overlay the historic beach on the east side of Elliott Bay, which occurs at depths between 12 feet and 28 feet below contemporary ground surfaces. The historic beach and deposits directly below the historic beach have high probabilities for archaeological deposits.

Segment 3: Queen Anne/Seattle Center/Belltown

Geotechnical data for Segment 3: Queen Anne/Seattle Center/Belltown are drawn from 10 unpublished boring logs, information in archaeological overviews and construction monitoring reports, and historic period documentation of regarding activities in the area. Alignments within street rights-of-way follow areas that were graded into glacial deposits during historic period regarding operations and do not have fill materials or native soils that might contain intact archaeological materials. Some city blocks at the south end of the segment had two to six feet of rubble and fill prior to construction of modern office buildings and hotels. The fill was removed when the buildings were constructed. None of the studies indicate the presence of undisturbed native soils that might contain intact hunter-fisher-gatherer or ethnographic period archaeological deposits.

Segment 4: Downtown/Pioneer Square

Nine unpublished geotechnical boring logs and archaeological construction monitoring reports for construction projects in the Pioneer Square vicinity document between 15 feet and 23 feet of historic period fill overlaying the former tideflats of a historic period lagoon in the King Street vicinity. Multiple, superimposed beach surfaces occur below the historic period tideflats and beaches in the area, and may have intact ethnographic period and hunter-fisher-gatherer archaeological deposits.

Segment 5: SODO/Chinatown International District/Pioneer Square

Twenty unpublished geotechnical boring logs for the Seattle Monorail Project, 51 unpublished geotechnical boring logs for other projects, and archaeological construction monitoring reports provide stratigraphic data for areas south of S Main Street in Segment 5: SODO/Chinatown International District/Pioneer Square. Historic period fill ranges in depth from 19 feet to 36 feet below the contemporary ground surface. Fill types include material with construction debris mixed with soils from construction excavations, glacial deposits removed from construction sites throughout the Downtown area and dumped on the former tideflats of Elliott Bay, and hydraulic fill that was placed during regarding operations in Downtown and along the west side of Beacon Hill. Historic period beaches are demarcated by shell fragments, an absence of massive historic period construction debris, and matrices ranging from silt and clay to sand and gravel deposits. Multiple beach surfaces are superimposed between 19 and 220 feet below the contemporary ground surface. Alternating sequences of coarse-grained sand and gravel and fine-grained silt and clay document the infilling of the Duwamish Embayment and rising sea level over the past 10,000 to 9,000 years. Geotechnical boring logs from the Seahawks Stadium vicinity exhibit landslide facies and shearing of bedding planes due to seismic activity on the Seattle Fault Zone, which crosses the area from west-to-east. Old beach landforms may have inundated and filled hunter-fisher-gatherer and ethnographic period archaeological deposits.

Segment 6: West Seattle

Ten unpublished geotechnical boring logs and archaeological construction monitoring reports document subsurface stratigraphy in the vicinity of Pigeon Point and the lower reach of

Longfellow Creek. Historic period fill extends to depths between 15 feet and 30 feet below the contemporary ground surface in the former tideflats of Elliott Bay, north of the historic period mouth of Longfellow Creek.

SUMMARY

Analysis of geotechnical boring logs in the Seattle Monorail Project vicinity indicates intact archaeological deposits may occur in some portions of proposed alignments, including alignments on Elliott Avenue W, the Pioneer Square area, SODO, and the Pigeon Point and lower reach of Longfellow Creek in West Seattle.

IMPLICATIONS FOR LAND USE AND PROBABILITY FOR HUNTER-FISHER-GATHERER, ETHNOGRAPHIC PERIOD, AND HISTORIC PERIOD ARCHAEOLOGICAL RESOURCES

SEGMENT 1: BALLARD

Areas with a high probability for significant hunter-fisher-gatherer and ethnographic period archaeological deposits would be at the south end of the segment in the former embayment of Salmon Bay. Historic period archaeological materials may occur within city blocks where stations are proposed, but there is a low probability for significant historic materials.

SEGMENT 2: INTERBAY/MAGNOLIA

Areas with a high probability for significant hunter-fisher-gatherer and ethnographic period archaeological deposits include the north end of the segment in the former embayment of Salmon Bay and the route from the south end of 15th Avenue W, along Elliott Avenue W, to W Harrison Street. Archaeological materials could include deposits associated with villages or short-term campsites, and could have shell, fish bone, terrestrial and marine mammal food remains, pits, hearths, and stone, mammal bone, and antler tools, and would probably date within the past 2,000 years. An ethnographic period village was reported on the former shoreline of Salmon Bay in the Ballard vicinity (Waterman ca. 1920, 1922), and Smith Cove was utilized as a seasonal camping area, as was the mouth of a small stream that drained the west side of Queen Anne Hill. The stream mouth was a seasonal camping area where nets were erected to trap waterfowl as they flew from Lake Union to Smith Cove and Elliott Bay (Waterman ca. 1920, 1922).

There is a low probability for significant historic archaeological materials that date to before the twentieth century in the Interbay Segment because of the amount of dredging, depth of fill, and subsequent development that has taken place. Materials dating to the twentieth century may include architectural and domestic items including wire nails, window glass, brick, wood, ceramics, vessel glass, bottle glass, utensils, clothing parts such as buttons, buckles and shoe leather and other personal items associated with residential use. Historic materials associated with the railroad and industrial use of the area may include metal fragments, machinery parts,

wood debris, metal and glass containers and automobile parts. Significant historic period archaeological materials may include the remains of wharves, sawmills, and railroad trestles and related artifacts along the former tideflats of Elliott Bay and Salmon Bay. There is a moderate probability for early settlement period resources in the area of Smith Cove. Isolated historic artifacts may occur in the remainder of the segment, but there is a low probability for significant recorded or unknown historic resources. Historic period archaeological materials may occur on the early historic period beach and bluff system on the east side of Elliott Bay. Historic period archaeological deposits would be within the right-of-way of Elliott Avenue W.

INTERBAY OPERATIONS CENTER

The locality could have unrecorded significant hunter-fisher-gatherer or ethnographic period archaeological deposits associated with the Smith Cove marsh. Processing features, stone tools, and bone tools may occur. Historic resources encountered in this area may include personal and domestic items associated with residential use. Materials from a mattress factory may include metal springs, fabric fragments, mattress buttons and machinery parts. Underground storage tanks for oil may also be present in the area. These resources would probably not be significant.

SEGMENT 3: QUEEN ANNE/SEATTLE CENTER/BELLTOWN

Much of the eastern portion of Segment 3: Queen Anne/Seattle Center/Belltown was extensively modified during regrading activities, between 1890 and 1931, when Denny Hill and street grades were lowered (Morse 1989:Table 1). The segment has a low probability for intact significant hunter-fisher-gatherer and ethnographic period archaeological deposits. An ethnographic village was on a prairie habitat east and north of the segment (Waterman ca. 1920, 1922), and an ethnographic period trail extended from Elliott Bay to the southwest corner of Lake Union on an alignment that approximated the contemporary Republican Street right-of-way. Isolated stone and bone tools dating to the ethnographic period may have occurred on the trail tread at one time. Artifacts would have been moved and destroyed when Republican Street was graded and paved. The area also was extensively modified during multiple construction episodes of the Seattle Center.

Because of the extensive regrading and subsequent development that took place in the area, there is a low probability for significant, intact historic period archaeological materials. Significant historic period archaeological resources dating between 1905 and 1917 may be present at a proposed station near Fifth Avenue and Broad Street (Figure 4). Historic period archaeological resources dating between 1905 and 1917 may be present that are associated with the City and Dye Works and possible worker's housing.

SEGMENT 4: DOWNTOWN/PIONEER SQUARE

The rights-of-way of Fifth Avenue, Stewart Street, and Second Avenue north of Yesler Way were regraded and lowered between 1903 and 1912, and have a low probability for intact hunter-fisher-gatherer and ethnographic period archaeological deposits (Morse 1989:Table 1). The Yesler Way and S King Street localities have a high probability for hunter-fisher-gatherer and ethnographic period archaeological deposits and may have evidence of village or camp deposits

that date within the past 2,000 years on the shoreline of a small tidal lagoon that was present in the early historic period. An ethnographic village was on the west side of the lagoon and the lagoon was a prime locale to fish for flatfish (Waterman ca. 1920, 1921). The north and east banks of the lagoon may have archaeological deposits from ethnographic period fishing and shellfish processing activities.

Significant historic period archaeological materials associated with early Euroamerican settlement, the Great Seattle Fire of 1889, and economic development of Downtown Seattle may occur in alignment alternatives in the Yesler Way and S King Street vicinity. Areas near Pike Street and Madison Street within city blocks may have significant early historic period archaeological materials from residences, commercial enterprises, and churches.

SEGMENT 5: SODO/CHINATOWN INTERNATIONAL DISTRICT/PIONEER SQUARE

The vicinity of S King Street may have evidence from hunter-fisher-gatherer villages or short-term camps that date within the past 2,000 years. Archaeological deposits may be on the east side of a tidal lagoon that was extant in the early historic period. Old tideflats and beaches north of S Royal Brougham Way probably subsided, or lowered in elevation, at least three feet during an earthquake on the Seattle Fault Zone approximately 1,100 years ago (Bucknam 1998). The landforms may have features such as hearths and rock pavements used to dry and smoke meat, clams, and plant foods; midden deposits with food refuse; debris from tool manufacturing; and stone tools and bone tools. Archaeological materials on the old, subsided beaches and tideflats would probably date between 2,000 and 1,100 years ago. Task groups from a nearby ethnographic village on the west side of the lagoon may have deposited food remains or tools from fishing and shellfish processing activities on the east side of the lagoon, within the project alignment (Waterman ca. 1920, 1922). The segment south of S Royal Brougham Way would cross tideflats that date within the past 500 years (Dragovich et al. 1994). The former tideflats of Elliott Bay could have wood stakes, matting, basketry, or rock alignments associated with fish weirs and concentrations of shell and/or rock from shellfish gathering and processing. The materials could date prior to Euroamerican contact or from the ethnographic period.

The north end of the alignment alternative may have significant early historic period archaeological deposits on the former shoreline of Elliott Bay or associated with the Great Seattle Fire of 1889.

Historic archaeological resources in the area might include those from bakeries such as mixer and oven parts and other baking implements such as pans, sheets, and utensils. Large-scale industries would be represented by historic archaeological resources that may include materials that were created or stored in the businesses and warehouses in the area. Items related to pottery production might include ceramic fragments and kiln parts while artifacts related to foundries and other metal working establishments may be represented by metal pieces, slag, and machinery parts. Materials from canning and can distribution industries might include tin cans, machinery parts, and wooden crate fragments. Evidence of meatpacking businesses may include tin cans, cutting implements, and faunal remains. Textile manufacture may be represented by items such as loom parts, fabrics, thread bobbins, and sewing machine parts. Domestic items

dumped in the area might include toiletry containers, cookware, clothing and other personal items such as buttons, jewelry, coins, and smoking pipe fragments.

SEGMENT 6: WEST SEATTLE

Segment 6: West Seattle along S Spokane Street would cross tideflats that formed from sediment deposited by the Duwamish River within the past 500 years. The tideflats could have wood stakes, matting, basketry, or rock alignments associated with fish weirs and concentrations of shell and/or rock from shellfish gathering and processing. The north end of Pigeon Point and the lower reach of Longfellow Creek have high probabilities for significant hunter-fisher-gatherer archaeological deposits that may date within the past 2,000 years. The Pigeon Point vicinity may have archaeological deposits from short-term camps that could include food remains of shell, fish bone, terrestrial and marine mammals, pits, hearths, and stone, bone, and antler tools. Archaeological materials in the lower reach of Longfellow Creek could include deposits associated with villages or short-term campsites, and could have shell, fish bone, terrestrial and marine mammal food remains, pits, hearths, and stone, mammal bone, and antler tools. Both Pigeon Point and Longfellow Creek have ethnographic place names suggesting the areas were used during the ethnographic period (Waterman ca. 1920, 1922). Glacial drift plains in the southern portion of segment have a low probability for hunter-fisher-gatherer and ethnographic period archaeological resources. The Delridge Way vicinity in Segment 6: West Seattle has a high probability for intact, significant historic period archaeological deposits beneath fill. Significant historic archaeological resources in this area could include remnants of dwellings, and domestic and personal items associated with Youngstown. The 1944 Sanborn map depicts a cluster of small dwellings in the area (Sanborn Map Company 1944). Historic materials reflecting the domestic life of twentieth century Youngstown residents, most of whom would have been associated with the Pacific Steel Mill, may provide significant information about the life and socioeconomic status of these millworkers.

FIELD RECONNAISSANCE

FIELD METHODS

On May 14, 2003, LAAS archaeologists Dennis Lewarch and Gretchen Kaehler conducted field reconnaissance of areaways on Second Avenue S, within the Seattle Monorail Project and the Pioneer Square Historic District. Seattle Monorail Project representatives accompanied the archaeologists, the Sinking Ship Areaway Site (45KI685). LAAS archaeologists excavated shovel probes in two areaways, the Sinking Ship Garage areaway, at Second Avenue S and Yesler and arranged for entry into buildings. Field methods consisted of pedestrian survey, photographic documentation, and excavation of shallow shovel probes in areas with loose fill sediment. Pedestrian survey was opportunistic in nature as access to areaways was not available in all buildings along the Second Avenue and Second Avenue S portions of the alignment. Shovel probes were placed in unfinished areaways that still contained dirt floors. Many areaways had floors that were either finished with concrete or lined with rubble underlying plywood to promote drainage. When shovel probes could be placed, they were located as close

as possible to the outer retaining wall where intact deposits were more likely to occur. Portions of areaways lying near the interior of the building exhibited more disturbances from storage activities associated with current businesses. Shovel probes were 30 to 35 centimeters in diameter and were excavated to a maximum depth of 25 centimeters. LAAS archaeologists photographed areaways and recorded characteristics of each areaway on LAAS Shovel Probe forms, Daily Tracking Logs, and Photographic Logs. All forms and photographs are on file at LAAS.

FIELD RESULTS

One historic period site was identified during field reconnaissance, the Sinking Ship Areaway Site (45KI685). LAAS archaeologists excavated shovel probes in two areaways, the Sinking Ship Garage areaway, at Second Avenue S and Yesler Way, and the Masin's Furniture Store areaway at Second Avenue S and Main Street. All other areaways had either concrete or brick floors, or had been "built-out" to retaining walls beneath Second Avenue S that support the contemporary roadway. Built-out areaways are now part of the basements of buildings along Second Avenue S and are utilized as extra storage space or have been converted to commercial use. The areaways in the Smith Tower have been incorporated into a fitness center in the basement of the building, while the areaway along Second Avenue in the Union Gospel Mission is now part of a men's washroom.

LAAS archaeologists could not gain access to several areaways in abandoned and boarded buildings. Some of the areaways may have archaeological materials.

Shovel Probe 1 was in the southeast corner of the Sinking Ship Garage areaway along Second Avenue, outside the intersection of two sections of extant ceramic tile floor (Figure 7). The shovel probe was excavated to a maximum depth of 25 centimeters and was in a loose, grayish brown sandy silt fill deposit. The fill was mixed with brick and mortar fragments and broken ceramic tile. The ceramic tile was associated with a partially intact mosaic tile west and north of the shovel probe. Shovel Probe 2 was in an areaway in the basement of Masin's Furniture Store, at the corner of Second Avenue S and Main Street. The basement area had a damp, dirt floor with an area of plank flooring around the foot of an old metal staircase that once provided access to Main Street. Shovel Probe 2 was in an area in the southwest corner of the areaway. Matrices consisted of medium brown alluvial silt and fill sediments and did not have artifacts. The shovel probe was terminated at 10 centimeters below the surface of the basement floor when a wood plank was intersected. Further probing with the shovel blade indicated that the wood planking extended for at least two meters to the east and west of the shovel probe.

The areaway in Masin's Furniture Store may have the additional remnants of a planked sidewalk. The vicinity of Second Avenue S and Main Street was formerly tideflats that were filled to create more usable land during the late 1800s. The basement of the building is inundated during periods of heavy rain, with as much as three feet of water covering portions of the basement that have not been finished. Silt from fill sediments in Second Avenue S washes into the basement during heavy rains. Before the levels of the streets were raised in 1893, sidewalks and streets were often composed of wooden planking to make them passable for horses and pedestrians. It

is possible that the areaway Masin's Furniture Store has a portion of one of the old planked sidewalks.

All other areaways examined in the Second Avenue S vicinity had concrete or brick floors, or had been built-out beneath Second Avenue S.

IDENTIFIED ARCHAEOLOGICAL RESOURCES

One historic period site, a mosaic tile floor in the Sinking Ship Garage areaway, was identified. The Sinking Ship Areaway Site (45KI685) consists of a tile floor remnant of the Occidental/Seattle Hotel that was first built in 1864. The hotel was rebuilt in 1883 to 1884 and expanded in 1887. After the hotel burned in the Great Seattle Fire of 1889, the hotel was rebuilt and renamed the Seattle Hotel. The Seattle Hotel stood in the area until it was demolished in the 1960s. The tile floor was probably installed during 1883 to 1884 and incorporated into the areaway when the hotel was rebuilt in after the 1889 fire. The site is probably not eligible for listing in the NRHP because it lacks integrity of condition.

CONCLUSIONS

SIGNIFICANT ARCHAEOLOGICAL RESOURCES

No significant archaeological resources have been recorded within the Seattle Monorail Project. The former shorelines and tideflats of Salmon Bay, Smith Cove, Elliott Bay, and Pigeon Point, and the lower reach of the Longfellow Creek drainage in West Seattle, have high probabilities for significant, unrecorded hunter-fisher-gatherer and ethnographic period archaeological deposits. Based on the extant archaeological record for hunter-fisher-gatherer and ethnographic period archaeological resources in Seattle, any intact hunter-fisher-gatherer or ethnographic period archaeological deposits would probably be significant and eligible for listing in the National Register of Historic Places.

Archaeologists have identified historic period refuse in Downtown Seattle as well as in areas beneath fill that may have intact archaeological deposits (Hart Crowser 1999; Hart-Crowser and Associates 1986a, 1986b; Hart Crowser, Incorporated 1998; Liddle 1999; Miss 1998), though no significant historic period archaeological sites have been recorded in Downtown Seattle. Based on the extant historic period archaeological record for the Seattle vicinity, any intact historic period archaeological deposits that have artifact and feature assemblages that could be used to address research questions regarding early historic period settlement, economic development of Seattle, the Great Seattle Fire of 1889, or ethnicity, would probably be significant and eligible for listing in the National Register of Historic Places.

IMPACTS ANALYSIS

OPERATION

Operation of the Seattle Monorail Project would not affect archaeological resources in any of the segments.

CONSTRUCTION

Significant, unknown hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources may occur in alternatives and options within segments of the Seattle Monorail Project. LAAS estimated the probability for archaeological resources based on analysis of geomorphology, archival information, historic period maps, and patterns in the archaeological record of Southern Puget Sound. Impacts to archaeological resources would be limited to locations where some columns for guideways would be constructed, some areas where bridge piers may be constructed, the operations facility, some stations where buildings would be removed, and/or stations where grading would penetrate fill into native soils.

Potential impacts to archaeological resources are summarized by segment, alternative, option, station, and operations facility in Table 2.

NO-BUILD ALTERNATIVE

No significant archaeological resources would be affected by the no-build alternative.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable adverse effects to archaeological resources or traditional cultural resources would occur. All impacts could be mitigated through development of a Memorandum of Agreement, an Archaeological Treatment Plan, and an Archaeological Construction Monitoring Plan for the Seattle Monorail Project.

CUMULATIVE IMPACTS

Potential effects to archaeological sites resulting from construction of the Seattle Monorail Project would combine with effects of planned projects in areas within the City of Seattle that have a high probability for hunter-fisher-gatherer, ethnographic period, or historic period archaeological resources. Areas with a high probability for archaeological resources in Seattle include marine shorelines, such as the former margins of Salmon Bay and Smith Cove in Ballard and Interbay, and the early historic period shoreline and tideflats of Elliott Bay in Interbay, Downtown Seattle, SODO, and West Seattle. The Duwamish River floodplain and the former tideflats at the mouth of the river, streams with salmon runs, and the margins of Lake Washington also have high probabilities for archaeological resources. The City of Seattle Magnolia Bridge Replacement Project may include construction excavation or other subsurface ground disturbance in areas with a high probability for archaeological resources in the Interbay vicinity. Construction excavation for the City of Seattle South Lake Union Improvements

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 2. Summary of Potential Impacts to Unknown Archaeological Resources That May Be Significant

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Segment 1: Ballard	1.1 - West Side of 15 th	No effect	No effect	No effect
	1.1(s) – West Side of 15 th with single beam guideway	No effect	No effect	No effect
	1.2 - Center of 15 th	No effect	No effect	No effect
	Preferred Alternative (PA)	Construction of bridge supports may affect unknown hunter-fisher-gatherer archaeological resources	Construction of bridge supports may affect unknown ethnographic period archaeological resources	No effect
	1.1.1 West Bridge	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	1.1.2 Far West Bridge	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	1.1.1(s) West single beam guideway bridge	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	1.2 East Bridge	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Crown Hill 1 (West, 85 th)	1.1	No effect	No effect	No effect
Crown Hill 1A (West, 85 th)	1.1, PA	No effect	No effect	No effect
Crown Hill 2 (Center)	1.2	No effect	No effect	No effect
NW 65 th 1 (West)	1.1	No effect	No effect	No effect
NW 65 th 1A (West)	1.1	No effect	No effect	No effect
NW 65 th 1B (West)	1.1(s), PA	No effect	No effect	No effect
NW 65 th 2 (Center)	1.2	No effect	No effect	No effect
NW Market 1 (Southwest)	1.1	No effect	No effect	No effect
NW Market 2 (Center)	1.2	No effect	No effect	No effect

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
NW Market 3 (Northwest)	1.1	No effect	No effect	No effect
NW Market 3A (Northwest)	1.1(s), PA	No effect	No effect	No effect
Segment 2: Interbay/Magnolia	2.1 - West Side of 15 th /Center of Elliott	May affect unknown hunter-fisher-gatherer archaeological resources in Salmon Bay, on Smith Cove, and on the former tideflats and shoreline of Elliott Bay	May affect unknown ethnographic period archaeological resources in Salmon Bay, on Smith Cove, and on the former tideflats and shoreline of Elliott Bay	May affect unknown historic period archaeological resources on the former shoreline of Elliott Bay and at the base of bluffs
	2.1(s) – West side of 15 th /Center of Elliott with single beam	May affect unknown hunter-fisher-gatherer archaeological resources in Salmon Bay, on Smith Cove, and on the former tideflats and shoreline of Elliott Bay	May affect unknown ethnographic period archaeological resources in Salmon Bay, on Smith Cove, and on the former tideflats and shoreline of Elliott Bay	May affect unknown historic period archaeological resources on the former shoreline of Elliott Bay and at the base of bluffs
	2.2 - Center of 15 th /West Side of Elliott	May affect unknown hunter-fisher-gatherer archaeological resources in Salmon Bay, on Smith Cove, and on the former tideflats and shoreline of Elliott Bay	May affect unknown ethnographic period archaeological resources in Salmon Bay, on Smith Cove, and on the former tideflats and shoreline of Elliott Bay	May affect unknown historic period archaeological resources on the former shoreline of Elliott Bay and at the base of bluffs
	Preferred Alternative (PA)	May affect unknown hunter-fisher-gatherer archaeological resources in Salmon Bay, on Smith Cove, and on the former tideflats and shoreline of Elliott Bay	May affect unknown ethnographic period archaeological resources in Salmon Bay, on Smith Cove, and on the former tideflats and shoreline of Elliott Bay	May affect unknown historic period archaeological resources on the former shoreline of Elliott Bay and at the base of bluffs
	Operations Center	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	2.1.1 West Bridge Connection	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	2.1.2 Far West Bridge Connection	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Dravus 1 (16 th)	2.1	No effect	No effect	No effect
Dravus 1A (16 th)	2.1	No effect	No effect	No effect
Dravus 1B (Barrett)	2.1, PA	No effect	No effect	No effect
Dravus 2 (15 th)	2.2	No effect	No effect	No effect
Howe 1 (West)	2.1	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Howe 1A (Blaine)	2.1, (PA future)	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Howe 2 (Center)	2.2	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Prospect 3 (West)	2.2	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Elliott and Mercer 1 (Center)	2.1	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Elliott and Mercer 1A (Center)	2.1, PA	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Elliott and Mercer 2 (West)	2.2	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Segment 3: Queen Anne/Seattle Center/Belltown	3.1 Seattle Center/Republican	No effect	No effect	No effect
	3.2 Mercer	No effect	No effect	No effect
	3.3 Thomas	No effect	No effect	No effect
	3.5 Second/Denny	No effect	No effect	No effect
	Preferred Alternative (PA)	No effect	No effect	No effect
	3.1.1 through the EMP	No effect	No effect	No effect
	3.1.2 around the EMP	No effect	No effect	No effect
	3.1.3 over the east side of Fifth Avenue North to the Fifth and Broad 1 (Southeast) Station	No effect	No effect	No effect
	3.1.4 over the center of Fifth Avenue North to the Fifth and Broad 1A (Southwest) Station	No effect	No effect	No effect

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
	3.2.1 remove existing Monorail on Fifth Avenue between Denny Way and Virginia Street	No effect	No effect	No effect
	3.2.2 retain existing Monorail on Fifth Avenue between Denny Way and Virginia Street	No effect	No effect	No effect
	3.2.3 Guideways separate to east and west sides of Fifth Avenue North to reach Fifth and Broad 1A (Southwest) Station	No effect	No effect	No effect
Seattle Center/Queen Anne 1 (North)	3.1, 3.2	No effect	No effect	No effect
Seattle Center/Queen Anne 1A (North)	3.1, 3.2, PA	No effect	No effect	No effect
Seattle Center/Queen Anne 2 (South)	3.3, 3.5	No effect	No effect	No effect
Seattle Center/Fifth and Broad 1 (Southeast)	3.1, 3.3	No effect	No effect	May affect unknown historic period archaeological resources
Seattle Center/Fifth and Broad 1A (Southwest)	3.1, 3.2, 3.3, PA	No effect	No effect	No effect
Seattle Center/Fifth and Broad 2 (Harrison)	3.2	No effect	No effect	No effect
Denny 3	3.5	No effect	No effect	No effect
Belltown 1 (Center-West)	3.1, 3.2, 3.3, 3.5	No effect	No effect	No effect
Belltown 1A (Center-West)	3.1, 3.2, 3.3, 3.5, PA	No effect	No effect	No effect
Belltown 2 (Center-East)	3.1, 3.3, 3.5	No effect	No effect	No effect
Belltown 3 (West)	3.2	No effect	No effect	No effect

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Segment 4: Downtown/Pioneer Square	4.1 - West Side of Second	May affect unknown hunter-fisher-gatherer archaeological resources in the Yesler Way and S King Street vicinity	May affect unknown ethnographic period archaeological resources in the Yesler Way and S King Street vicinity	May affect unknown historic period archaeological resources in the Yesler Way and S King Street vicinity
	4.2 - East Side of Second with Crossover	May affect unknown hunter-fisher-gatherer archaeological resources in the Yesler Way and S King Street vicinity	May affect unknown ethnographic period archaeological resources in the Yesler Way and S King Street vicinity	May affect unknown historic period archaeological resources in the Yesler Way and S King Street vicinity
	4.3 - Center of Second	May affect unknown hunter-fisher-gatherer archaeological resources in the Yesler Way and S King Street vicinity	May affect unknown ethnographic period archaeological resources in the Yesler Way and S King Street vicinity	May affect unknown historic period archaeological resources in the Yesler Way and S King Street vicinity
	4.4 – East of Center Option	May affect unknown hunter-fisher-gatherer archaeological resources in the Yesler Way and S King Street vicinity	May affect unknown ethnographic period archaeological resources in the Yesler Way and S King Street vicinity	May affect unknown historic period archaeological resources in the Yesler Way and S King Street vicinity
	Preferred Alternative (PA)	Alignment may affect unknown hunter-fisher-gatherer archaeological resources in the Yesler Way and S King Street vicinity. The station on the West side of Second at Yesler may affect unknown hunter-fisher-gatherer archaeological resources	Alignment may affect unknown ethnographic period archaeological resources in the Yesler Way and S King Street vicinity. The station on the west side of Second at Yesler may affect unknown ethnographic period archaeological resources	Alignment may affect unknown historic period archaeological resources in the Yesler Way and S King Street vicinity. Stations on the West side of Second near Pike, Madison, and Yesler may affect unknown historic period archaeological resources
	4.1.1 Fifth and Stewart (Northwest)	No effect	No effect	No effect
	4.1.2 Fifth and Stewart (Virginia)	No effect	No effect	No effect
	Fifth and Stewart 1 (Northwest)	No effect	No effect	No effect
	Fifth and Stewart 1A (West)	No effect	No effect	No effect
	Fifth and Stewart 2 (Virginia)	No effect	No effect	No effect
Fifth and Stewart 2A (Virginia Center)	4.1.2, PA	No effect	No effect	No effect
Fifth and Stewart 3 (Lenora)	4.2, 4.3, 4.4	No effect	No effect	No effect

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Pike 1 (West) A	4.1	No effect	No effect	May affect unknown historic period archaeological resources
Pike 1 (West) B	4.1, PA	No effect	No effect	May affect unknown historic period archaeological resources
Pike 2 (East)	4.2	No effect	No effect	May affect unknown historic period archaeological resources
Pike 2A (East Center)	4.4	No effect	No effect	May affect unknown historic period archaeological resources
Pike 3 (Center)	4.3	No effect	No effect	No effect
Madison 1 (West)	4.1, PA	No effect	No effect	May affect unknown historic period archaeological resources
Madison 2 (East)	4.2	No effect	No effect	May affect unknown historic period archaeological resources
Madison 2A (East Center)	4.4	No effect	No effect	May affect unknown historic period archaeological resources
Madison 3 (Center)	4.3	No effect	No effect	No effect
Yesler 1 (West)	4.1, 4.2, 4.4, PA	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	May affect unknown historic period archaeological resources
Yesler 2 (Center)	4.3	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	May affect unknown historic period archaeological resources
Segment 5: SODO/Chinatown International District/Pioneer Square	5.1 - East side of Third/Utah	May affect unknown hunter-fisher-gatherer archaeological resources in the S King Street vicinity and on the former tideflats of Elliott Bay	May affect unknown ethnographic period archaeological resources in the S King Street vicinity and on the former tideflats of Elliott Bay	No effect
	5.2 - West side of Third/Utah	May affect unknown hunter-fisher-gatherer archaeological resources in the S King Street vicinity and on the former tideflats of Elliott Bay	May affect unknown ethnographic period archaeological resources in the S King Street vicinity and on the former tideflats of Elliott Bay	No effect
	5.2(s) – West Side of Third/Utah with single beam guideway	May affect unknown hunter-fisher-gatherer archaeological resources in the S King Street vicinity and on the former tideflats of Elliott Bay	May affect unknown ethnographic period archaeological resources in the S King Street vicinity and on the former tideflats of Elliott Bay	No effect

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Weller/King Street 1 (Standard) Weller/King Street 2 (Event) Safeco Field 1 Lander 1 (Northeast) Lander 2 (Southwest) Lander 3 (Diagonal) Lander 4 (Utah)	Preferred Alternative (PA)	May affect unknown hunter-fisher-gatherer archaeological resources in the S King Street vicinity and on the former tideflats of Elliott Bay	May affect unknown ethnographic period archaeological resources in the S King Street vicinity and on the former tideflats of Elliott Bay	No effect
	5.1.1 Utah Avenue S	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	5.1.2 First Avenue S	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	5.1	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	5.2, 5.2(s), PA	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	5.1, 5.2(s), PA	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	5.1	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	5.1	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	5.2, 5.2(s), PA	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
Segment 6: West Seattle	5.1	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	6.1 – Duwamish Crossing West Seattle Bridge dual beam guideways	May affect unknown hunter-fisher-gatherer archaeological resources on the former tideflats of Elliott Bay, the north end of Pigeon Point, and in the lower reach of Longfellow Creek	May affect unknown ethnographic period archaeological resources on the former tideflats of Elliott Bay, the north end of Pigeon Point, and in the lower reach of Longfellow Creek	May affect unknown historic period archaeological resources in the Delridge Way vicinity

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
	6.1(s) – Duwamish Crossing West Seattle Bridge single beam guideway	May affect unknown hunter-fisher-gatherer archaeological resources on the former tideflats of Elliott Bay, the north end of Pigeon Point, and in the lower reach of Longfellow Creek	May affect unknown ethnographic period archaeological resources on the former tideflats of Elliott Bay, the north end of Pigeon Point, and in the lower reach of Longfellow Creek	May affect unknown historic period archaeological resources in the Delridge Way vicinity
	6.2 – Duwamish Crossing new monorail-only West Seattle Bridge	May affect unknown hunter-fisher-gatherer archaeological resources on the former tideflats of Elliott Bay, the north end of Pigeon Point, and in the lower reach of Longfellow Creek	May affect unknown ethnographic period archaeological resources on the former tideflats of Elliott Bay, the north end of Pigeon Point, and in the lower reach of Longfellow Creek	May affect unknown historic period archaeological resources in the Delridge Way vicinity
	6.3(s) – Delridge Subsegment Delridge North single beam guideway	May affect unknown hunter-fisher-gatherer archaeological resources in the lower reach of Longfellow Creek	May affect unknown ethnographic period archaeological resources in the lower reach of Longfellow Creek	No effect
	6.4 – Delridge Subsegment Andover/Yancey	May affect unknown hunter-fisher-gatherer archaeological resources in the lower reach of Longfellow Creek	May affect unknown ethnographic period archaeological resources in the lower reach of Longfellow Creek	May affect unknown historic period archaeological resources in the Delridge Way vicinity
	6.4(s) – Delridge Subsegment Andover/Yancey single beam guideway	May affect unknown hunter-fisher-gatherer archaeological resources in the lower reach of Longfellow Creek	May affect unknown ethnographic period archaeological resources in the lower reach of Longfellow Creek	May affect unknown historic period archaeological resources in the Delridge Way vicinity
	6.5 Delridge Subsegment Genesee	May affect unknown hunter-fisher-gatherer archaeological resources in the lower reach of Longfellow Creek	May affect unknown ethnographic period archaeological resources in the lower reach of Longfellow Creek	May affect unknown historic period archaeological resources
	Preferred Alternative (PA)	Alignment may affect unknown hunter-fisher-gatherer archaeological resources on the former tideflats of Elliott Bay, the north end of Pigeon Point, and in the lower reach of Longfellow Creek	Alignment may affect unknown ethnographic period archaeological resources on the former tideflats of Elliott Bay, the north end of Pigeon Point, and in the lower reach of Longfellow Creek	Alignment may affect unknown historic period archaeological resources in the Delridge Way vicinity
	6.1.1 Duwamish Crossing past Pigeon Point	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	6.1.2 Duwamish Crossing to Pigeon Point	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
	6.1.1(s) Duwamish Crossing past Pigeon Point	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	6.1.2(s) Duwamish Crossing to Pigeon Point	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	No effect
	6.1.3 Avalon Subsegment Northwest Side of Fauntleroy Way SW	No effect	No effect	No effect
	6.1.4 Avalon Subsegment Southwest Side of Fauntleroy Way SW	No effect	No effect	No effect
	6.1.6 California/Morgan Junction Subsegment West of California	No effect	No effect	No effect
	6.1.6(s) California/Morgan Junction West of California single beam guideway	No effect	No effect	No effect
	6.2.1 Avalon Subsegment East side of 35 th Avenue SW	No effect	No effect	No effect
	6.2.2 Avalon Subsegment Center of 35 th Avenue SW and North side of SW Alaska Street	No effect	No effect	No effect
Delridge 1 (26 th)	6.1	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	May affect unknown historic period archaeological resources
Delridge 1A (Delridge and Andover)	6.4	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown historic period archaeological resources
Delridge 2 (Andover)	6.2	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	May affect unknown historic period archaeological resources

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Delridge 3 (Nucor)	6.3(s), PA	No effect	No effect	No effect
Delridge 4 (Genesee)	6.5	May affect unknown hunter-fisher-gatherer archaeological resources	May affect unknown ethnographic period archaeological resources	May affect unknown historic period archaeological resources
Avalon 1 (Center)	6.1	No effect	No effect	No effect
Avalon 2A (35 th)	6.2, 6.2.1	No effect	No effect	No effect
Avalon 2B (35 th)	6.2.2, PA	No effect	No effect	No effect
Alaska Junction 1 (42 nd /Edmunds)	6.1, PA	No effect	No effect	No effect
Alaska Junction 1A (42 nd /Edmunds)	6.1	No effect	No effect	No effect
Alaska Junction 2 (44 th /California)	6.2	No effect	No effect	No effect
Morgan Junction 1 (West)	6.1	No effect	No effect	No effect
Morgan Junction 1A (West)	6.1, 6.16, PA	No effect	No effect	No effect
Morgan Junction 2 (Center)	6.2	No effect	No effect	No effect

This Side of the Page Intentionally Left Blank

Project may affect archaeological resources on and adjacent to the early historic period shoreline of Lake Union, in the Seattle Center vicinity. Projects that may affect archaeological resources on the Downtown Seattle waterfront include the Washington State Department of Transportation-City of Seattle-Federal Highway Administration Alaskan Way Viaduct and Seawall Project and the Washington State Department of Transportation-City of Seattle SR 519 Project. Archaeological resources in the southern portion of Downtown Seattle or in the northern portion of SODO may be affected by construction for the Washington State Department of Transportation-Sound Transit King Street Renovation and Weller Street Bridge Project or the Washington State Department of Transportation-City of Seattle SR 519 Project. Other projects in the SODO area that may affect archaeological resources include the Washington State Department of Transportation-City of Seattle-Federal Highway Administration Alaskan Way Viaduct and Seawall Project, the City of Seattle S Lander Street Grade Separation Project, the Port of Seattle E Marginal Way Grade Separation Project, and the City of Seattle Spokane Street Widening Project. Construction excavation for the City of Seattle Spokane Street Widening Project also may affect archaeological resources in the West Seattle vicinity.

RECOMMENDATIONS

MITIGATION MEASURES

The following measures have been identified to mitigate adverse effects to significant unknown archaeological resources. Mitigation measures are based on estimated probabilities for buried archaeological resources that may be identified during construction excavation for columns, bridge piers, stations, and the operations facility. Mitigation measures were developed to protect archaeological resources that may be present and may be significant, while minimizing construction downtime.

OPERATION

No mitigation measures are required for operation of the Seattle Monorail Project.

CONSTRUCTION

Mitigation measures for archaeological resources that may be affected during construction excavation would include archaeological construction monitoring in areas with a high probability for significant subsurface archaeological resources, development of an Archaeological Treatment Plan, development of an Archaeological Construction Monitoring plan, and preparation of Supplemental Treatment Plans as necessary. Potential mitigation measures for archaeological resources are summarized by segment, alternative, option, station, and operations facility in Table 3. Mitigation measures would include the following:

The Seattle Monorail Project reviewed mitigation measures for archaeological resources and traditional cultural properties with the SHPO and agreed to pursue a Memorandum of Agreement (MOA) for archaeological resources. The MOA would be among the Seattle Monorail Project,

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources.

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Segment 1: Ballard	1.1 - West Side of 15 th	No mitigation required	No mitigation required	No mitigation required
	1.1(s) – West Side of 15 th with single beam guideway	No mitigation required	No mitigation required	No mitigation required
	1.2 - Center of 15 th	No mitigation required	No mitigation required	No mitigation required
	Preferred Alternative (PA)	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	1.1.1 West Bridge	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	1.1.2 Far West Bridge	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	1.1.1(s) West single beam guideway bridge	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	1.2 East Bridge	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Crown Hill 1 (West, 85 th)	1.1	No mitigation required	No mitigation required	No mitigation required
Crown Hill 1A (West, 85 th)	1.1, PA	No mitigation required	No mitigation required	No mitigation required
Crown Hill 2 (Center)	1.2	No mitigation required	No mitigation required	No mitigation required
NW 65 th 1 (West)	1.1	No mitigation required	No mitigation required	No mitigation required
NW 65 th 1A (West)	1.1	No mitigation required	No mitigation required	No mitigation required
NW 65 th 1B (West)	1.1(s), PA	No mitigation required	No mitigation required	No mitigation required
NW 65 th 2 (Center)	1.2	No mitigation required	No mitigation required	No mitigation required
NW Market 1 (Southwest)	1.1	No mitigation required	No mitigation required	No mitigation required
NW Market 2 (Center)	1.2	No mitigation required	No mitigation required	No mitigation required
NW Market 3 (Northwest)	1.1	No mitigation required	No mitigation required	No mitigation required
NW Market 3A (Northwest)	1.1(s), PA	No mitigation required	No mitigation required	No mitigation required
Segment 2: Interbay/Magnolia	2.1 - West Side of 15 th /Center of Elliott	Archaeological construction monitoring of bridge piers, columns on Smith Cove, and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers, columns on Smith Cove, and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of columns on Smith Cove and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	2.1(s) – West side of 15 th /Center of Elliott with single beam	Archaeological construction monitoring of bridge piers, columns on Smith Cove, and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers, columns on Smith Cove, and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of columns on Smith Cove and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
	2.2 - Center of 15 th /West Side of Elliott	Archaeological construction monitoring of bridge piers, columns on Smith Cove, and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers, columns on Smith Cove, and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of columns on Smith Cove and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	Preferred Alternative (PA)	Archaeological construction monitoring of bridge piers, columns on Smith Cove, and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers, columns on Smith Cove, and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of columns on Smith Cove and columns on east side of early historic period Elliott Bay; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	Operations Center	Archaeological construction; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	2.1.1 West Bridge Connection	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	2.1.2 Far West Bridge Connection	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring of bridge piers; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Dravus 1 (16 th)	2.1	No mitigation required	No mitigation required	No mitigation required
Dravus 1A (16 th)	2.1	No mitigation required	No mitigation required	No mitigation required
Dravus 1B (Barrett)	2.1, PA	No mitigation required	No mitigation required	No mitigation required
Dravus 2 (15 th)	2.2	No mitigation required	No mitigation required	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Howe 1 (West)	2.1	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Howe 1A (Blaine)	2.1, (PA future)	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Howe 2 (Center)	2.2	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Prospect 3 (West)	2.2	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Elliott and Mercer 1 (Center)	2.1	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Elliott and Mercer 1A (Center)	2.1, PA	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Elliott and Mercer 2 (West)	2.2	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Segment 3: Queen Anne/Seattle Center/Belltown	3.1 Seattle Center/Republican	No mitigation required	No mitigation required	No mitigation required
	3.2 Mercer	No mitigation required	No mitigation required	No mitigation required
	3.3 Thomas	No mitigation required	No mitigation required	No mitigation required
	3.5 Second/Denny	No mitigation required	No mitigation required	No mitigation required
	Preferred Alternative (PA)	No mitigation required	No mitigation required	No mitigation required
	3.1.1 through the EMP	No mitigation required	No mitigation required	No mitigation required
	3.1.2 around the EMP	No mitigation required	No mitigation required	No mitigation required
	3.1.3 over the east side of Fifth Avenue North to the Fifth and Broad 1 (Southeast) Station	No mitigation required	No mitigation required	No mitigation required
	3.1.4 over the center of Fifth Avenue North to the Fifth and Broad 1A (Southwest) Station	No mitigation required	No mitigation required	No mitigation required
	3.2.1 remove existing Monorail on Fifth Avenue between Denny Way and Virginia Street	No mitigation required	No mitigation required	No mitigation required
	3.2.2 retain existing Monorail on Fifth Avenue between Denny Way and Virginia Street	No mitigation required	No mitigation required	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
	3.2.3 Guideways separate to east and west sides of Fifth Avenue North to reach Fifth and Broad 1A (Southwest) Station	No mitigation required	No mitigation required	No mitigation required
Seattle Center/Queen Anne 1 (North)	3.1, 3.2	No mitigation required	No mitigation required	No mitigation required
Seattle Center/Queen Anne 1A (North)	3.1, 3.2, PA	No mitigation required	No mitigation required	No mitigation required
Seattle Center/Queen Anne 2 (South)	3.3, 3.5	No mitigation required	No mitigation required	No mitigation required
Seattle Center/Fifth and Broad 1 (Southeast)	3.1, 3.3	No effect	No effect	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Seattle Center/Fifth and Broad 1A (Southwest)	3.1, 3.2, 3.3, PA	No mitigation required	No mitigation required	No mitigation required
Seattle Center/Fifth and Broad 2 (Harrison)	3.2	No mitigation required	No mitigation required	No mitigation required
Denny 3	3.5	No mitigation required	No mitigation required	No mitigation required
Belltown 1 (Center-West)	3.1, 3.2, 3.3, 3.5	No mitigation required	No mitigation required	No mitigation required
Belltown 1A (Center-West)	3.1, 3.2, 3.3, 3.5, PA	No mitigation required	No mitigation required	No mitigation required
Belltown 2 (Center-East)	3.1, 3.3, 3.5	No mitigation required	No mitigation required	No mitigation required
Belltown 3 (West)	3.2	No mitigation required	No mitigation required	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Segment 4: Downtown/Pioneer Square	4.1 - West Side of Second	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	4.2 - East Side of Second with Crossover	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	4.3 - Center of Second	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	4.4 – East of Center Option	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	Preferred Alternative (PA)	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	4.1.1 Fifth and Stewart (Northwest)	No mitigation required	No mitigation required	No mitigation required
	4.1.2 Fifth and Stewart (Virginia)	No mitigation required	No mitigation required	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Fifth and Stewart 1 (Northwest)	4.1.1	No mitigation required	No mitigation required	No mitigation required
Fifth and Stewart 1A (West)	4.1.2	No mitigation required	No mitigation required	No mitigation required
Fifth and Stewart 2 (Virginia)	4.1.2, 4.3	No mitigation required	No mitigation required	No mitigation required
Fifth and Stewart 2A (Virginia Center)	4.1.2, PA	No mitigation required	No mitigation required	No mitigation required
Fifth and Stewart 3 (Lenora)	4.2, 4.3, 4.4	No mitigation required	No mitigation required	No mitigation required
Pike 1 (West) A	4.1	No mitigation required	No mitigation required	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Pike 1 (West) B	4.1, PA	No mitigation required	No mitigation required	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Pike 2 (East)	4.2	No mitigation required	No mitigation required	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Pike 2A (East Center)	4.4	No mitigation required	No mitigation required	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Pike 3 (Center)	4.3	No mitigation required	No mitigation required	No effect

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Madison 1 (West)	4.1, PA	No mitigation required	No mitigation required	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Madison 2 (East)	4.2	No mitigation required	No mitigation required	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Madison 2A (East Center)	4.4	No mitigation required	No mitigation required	May affect unknown historic period archaeological resources
Madison 3 (Center)	4.3	No mitigation required	No mitigation required	No effect
Yesler 1 (West)	4.1, 4.2, 4.4, PA	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	May affect unknown ethnographic Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Yesler 2 (Center)	4.3	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Segment 5: SODO/Chinatown International District/Pioneer Square	5.1 - East side of Third/Utah	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Weller/King Street 1 (Standard)	5.2 - West side of Third/Utah	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	5.2(s) – West Side of Third/Utah with single beam guideway	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	Preferred Alternative (PA)	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	5.1.1 Utah Avenue S	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	5.1.2 First Avenue S	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	5.1	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Weller/King Street 2 (Event)	5.2, 5.2(s), PA	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Safeco Field 1	5.1, 5.2(s), PA	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Lander 1 (Northeast)	5.1	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Lander 2 (Southwest)	5.1	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Lander 3 (Diagonal)	5.2, 5.2(s), PA	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Lander 4 (Utah)	5.1	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
Segment 6: West Seattle	6.1 – Duwamish Crossing West Seattle Bridge dual beam guideways	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
	6.1(s) – Duwamish Crossing West Seattle Bridge single beam guideway	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	6.2 – Duwamish Crossing new monorail-only West Seattle Bridge	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	6.3(s) – Delridge Subsegment Delridge North single beam guideway	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	6.4 – Delridge Subsegment Andover/Yancey	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	6.4(s) – Delridge Subsegment Andover/Yancey single beam guideway	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	6.5 Delridge Subsegment Genesee	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
	Preferred Alternative (PA)	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	6.1.1 Duwamish Crossing past Pigeon Point	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	6.1.2 Duwamish Crossing to Pigeon Point	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	6.1.1(s) Duwamish Crossing past Pigeon Point	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	6.1.2(s) Duwamish Crossing to Pigeon Point	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	No mitigation required
	6.1.3 Avalon Subsegment Northwest Side of Fauntleroy Way SW	No mitigation required	No mitigation required	No mitigation required
	6.1.4 Avalon Subsegment Southwest Side of Fauntleroy Way SW	No mitigation required	No mitigation required	No mitigation required
	6.1.6 California/Morgan Junction Subsegment West of California	No mitigation required	No mitigation required	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Delridge 1 (26 th)	6.1.6(s) California/Morgan Junction West of California single beam guideway	No mitigation required	No mitigation required	No mitigation required
	6.2.1 Avalon Subsegment East side of 35 th Avenue SW	No mitigation required	No mitigation required	No mitigation required
	6.2.2 Avalon Subsegment Center of 35 th Avenue SW and North side of SW Alaska Street	No mitigation required	No mitigation required	No mitigation required
	6.1	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
	6.4	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Delridge 1A (Delridge and Andover)	6.4	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Delridge 2 (Andover)	6.2	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Delridge 3 (Nucor)	6.3(s), PA	No mitigation required	No mitigation required	No mitigation required

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Table 3. Summary of Mitigation Measures for Archaeological Resources (continued).

Segment and Station Name	Alignment Alternatives	Significant Hunter-Fisher-Gatherer Resources	Significant Ethnographic Period Resources	Significant Historic Period Resources
Delridge 4 (Genesee)	6.5	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan	Archaeological construction monitoring; preparation of archaeological treatment plan and archaeological construction monitoring plan; may require preparation of a supplemental treatment plan
Avalon 1 (Center)	6.1	No mitigation required	No mitigation required	No mitigation required
Avalon 2A (35 th)	6.2, 6.2.1	No mitigation required	No mitigation required	No mitigation required
Avalon 2B (35 th)	6.2.2, PA	No mitigation required	No mitigation required	No mitigation required
Alaska Junction 1 (42 nd /Edmunds)	6.1, PA	No mitigation required	No mitigation required	No mitigation required
Alaska Junction 1A (42 nd /Edmunds)	6.1	No mitigation required	No mitigation required	No mitigation required
Alaska Junction 2 (44 th /California)	6.2	No mitigation required	No mitigation required	No mitigation required
Morgan Junction 1 (West)	6.1	No mitigation required	No mitigation required	No mitigation required
Morgan Junction 1A (West)	6.1, 6.16, PA	No mitigation required	No mitigation required	No mitigation required
Morgan Junction 2 (Center)	6.2	No mitigation required	No mitigation required	No mitigation required

U. S. Coast Guard, and OAHP. The U. S. Coast Guard would ensure that the undertaking is carried out in accordance with the agreement. The MOA would include provisions to deal with the discovery of unknown archaeological resources affected by the undertaking. The MOA would identify the responsible parties for complying with elements of the agreement, would outline the mitigation measures that will be applied, and would bind the signatories of the agreement to comply with the mitigation measures. The MOA would clearly set forward mitigation measures and allow comment and review by the signatories and Tribes prior to implementation.

An Archaeological Treatment Plan and an Archaeological Construction Monitoring Plan would be prepared prior to construction as directed in the MOA. A statistical sample of areas with medium and low probabilities for intact archaeological deposits will be included in the Archaeological Treatment Plan and the Archaeological Construction Monitoring Plan. Supplemental Treatment plans would be developed only if intact archaeological deposits are identified during construction monitoring. The plans will include provisions for advance training of archaeological staff to work in environments contaminated by hazardous materials. Archaeologists will consult with hazardous materials specialists during preparation of the Archaeological Treatment Plan and the Archaeological Construction Monitoring Plan to identify areas in advance of construction monitoring that may have hazardous materials below the contemporary ground surface. The Archaeological Treatment Plan and Supplemental Treatment plans will include provisions for recovery of perishable archaeological materials, such as artifacts of wood or fragments of baskets or matting, during archaeological data recovery excavation.

Archaeological Treatment Plan

An Archaeological Treatment Plan would be developed when column locations and other areas with subsurface construction excavation have been finalized, to minimize construction delays and to expedite agency and Tribal review in the event of an inadvertent archaeological discovery. An Archaeological Treatment Plan would include:

- Summary of the environmental and cultural setting of the project, including probable kinds archaeological resources.
- Archaeological research design with specific research problems for archaeological resources that may be present in project.
- Field and laboratory methodologies, including field techniques, data analysis, and data management procedures, for archaeological materials that may occur in project.
- Reporting requirements and an outline of main subject headings in reports.
- Project schedules and the role of Supplemental Treatment Plans.
- Curation procedures, identification of permanent curation facilities, and discussion of consultation procedures with affected Tribes.

- Procedures for treating human remains and for consulting with the King County Medical Examiner, the Washington State OAHP, and affected Tribes.
- Proposed activities to foster public participation in the undertaking and to disseminate results of investigations to the general public.
- Tribal consultation protocols and procedures.
- Schedule for progress reports.

Archaeological Construction Monitoring Plan

Archaeological construction monitoring would occur in column locations and other locations that have a high probability for unknown archaeological resources, if column construction and subsurface excavation in other areas allow for direct observation of excavated subsurface sediments. A sample of areas with medium and low probabilities for archaeological resources will be monitored. An Archaeological Construction Monitoring Plan would include:

- A review of construction techniques.
- Monitoring procedures, techniques, and protocols.
- Reporting requirements

Supplemental Treatment Plans

Supplemental Treatment Plans would be developed as needed only if unknown archaeological resources are identified during archaeological construction monitoring. Preparation of Supplemental Treatment Plans would allow rapid response for specific archaeological resources inadvertently discovered in areas with subsurface construction excavation. A Supplemental Treatment Plan would be developed within 24 hours of resource discovery, reviewed by the Seattle Monorail Project in 24 hours, and reviewed by the OAHP and affected Tribes within 48 hours. Supplemental Treatment Plans would be developed for archaeological resources prior to conducting archaeological test excavations of resources identified during archaeological construction monitoring or that are determined probably eligible for listing in the NRHP. Specific research questions and field methods would be developed for affected archaeological resources, based on the research design in the Archaeological Treatment Plan.

**Figure 1
Seattle Monorail Project
Green Line Corridor
Project Area**

Alternatives By Segment

Segment 1: Ballard

- 1.1 - West Side of 15th
- 1.1(s) - West Side of 15th with Single Beam
- 1.2 - Center of 15th/East Bridge

Segment 2: Interbay

- 2.1 - West Side of 15th/Center of Elliott
- 2.1(s) - West Side of 15th/Center of Elliott with Single Beam
- 2.2 - Center of 15th/West Side of Elliott

Segment 3: Queen Anne/Seattle Center/Belltown

- 3.1 - Seattle Center/Republican
- 3.2 - Mercer
- 3.3 - Thomas
- 3.5 - Second/Denny

Segment 4: Downtown

- 4.1 - West Side of Second
- 4.2 - East Side of Second with Crossover
- 4.3 - Center of Second
- 4.4 - East Center of Second

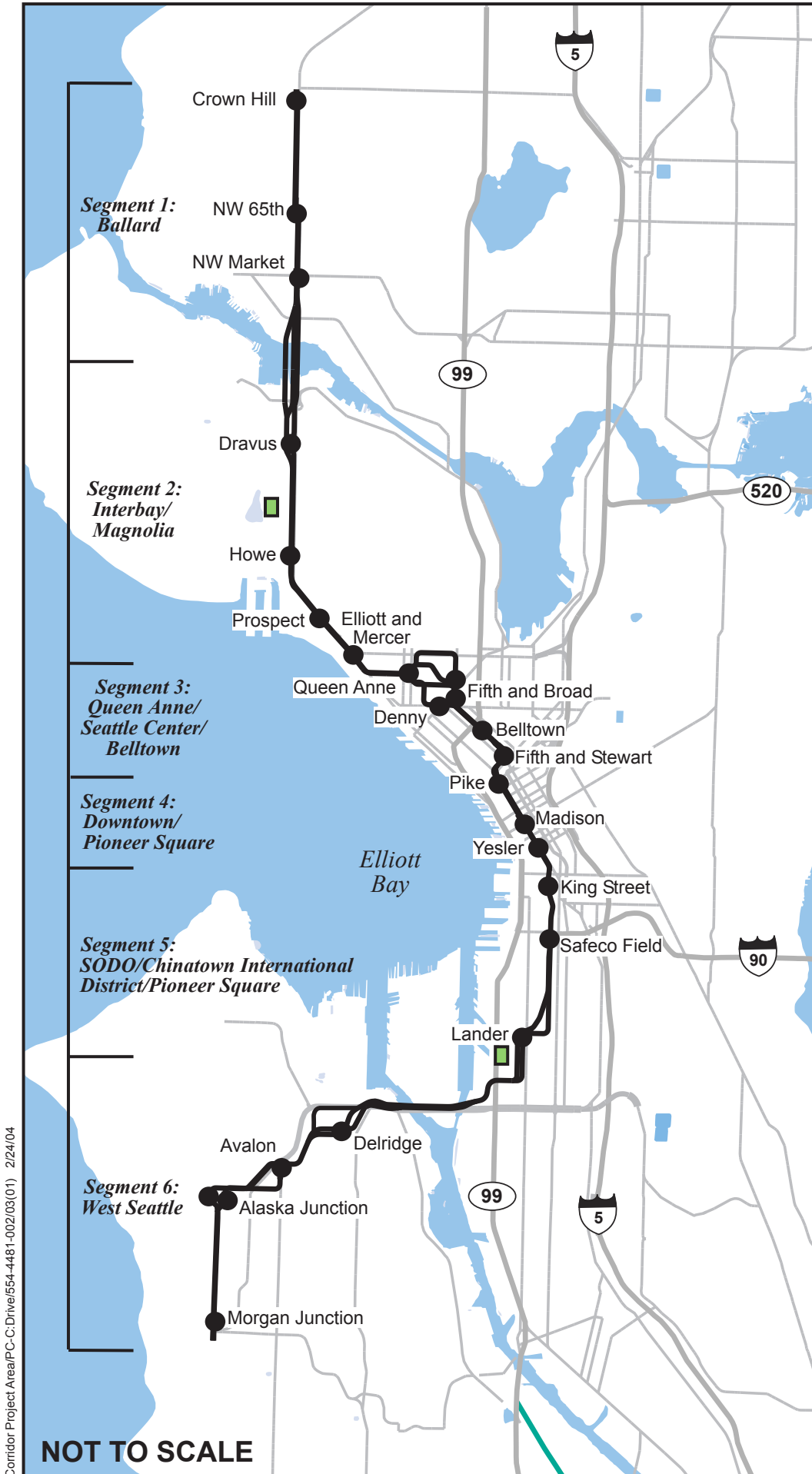
Segment 5: SODO

- 5.1 - East side of Third/Utah
- 5.2(s) - West Side of Third/Utah with Single Beam
- 5.2 - West side of Third/Utah

Segment 6: West Seattle

- 6.1 - West Seattle I
- 6.2 - West Seattle II
- 6.3(s) - Delridge North with Single Beam
- 6.4 - West Seattle Andover/Yancy Subsegment
- 6.4(s) - Andover/Yancy with Single Beam
- 6.5 - Genesee Subsegment

- Station Vicinities
- Operations Center Alternatives



NOT TO SCALE

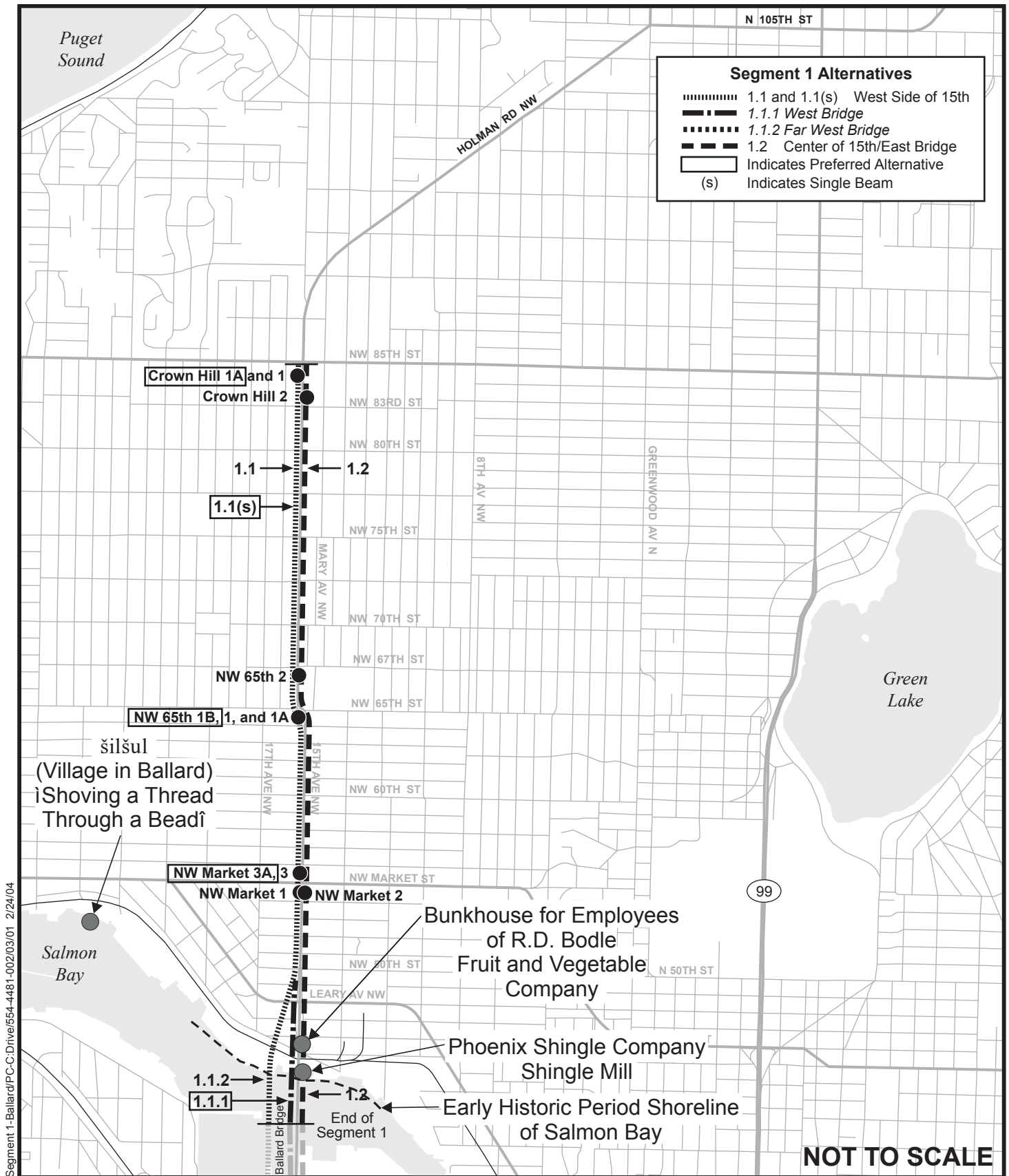


Figure 2
Segment 1: Ballard with
Ethnographic Places and
Historic Period Environmental
and Cultural Features

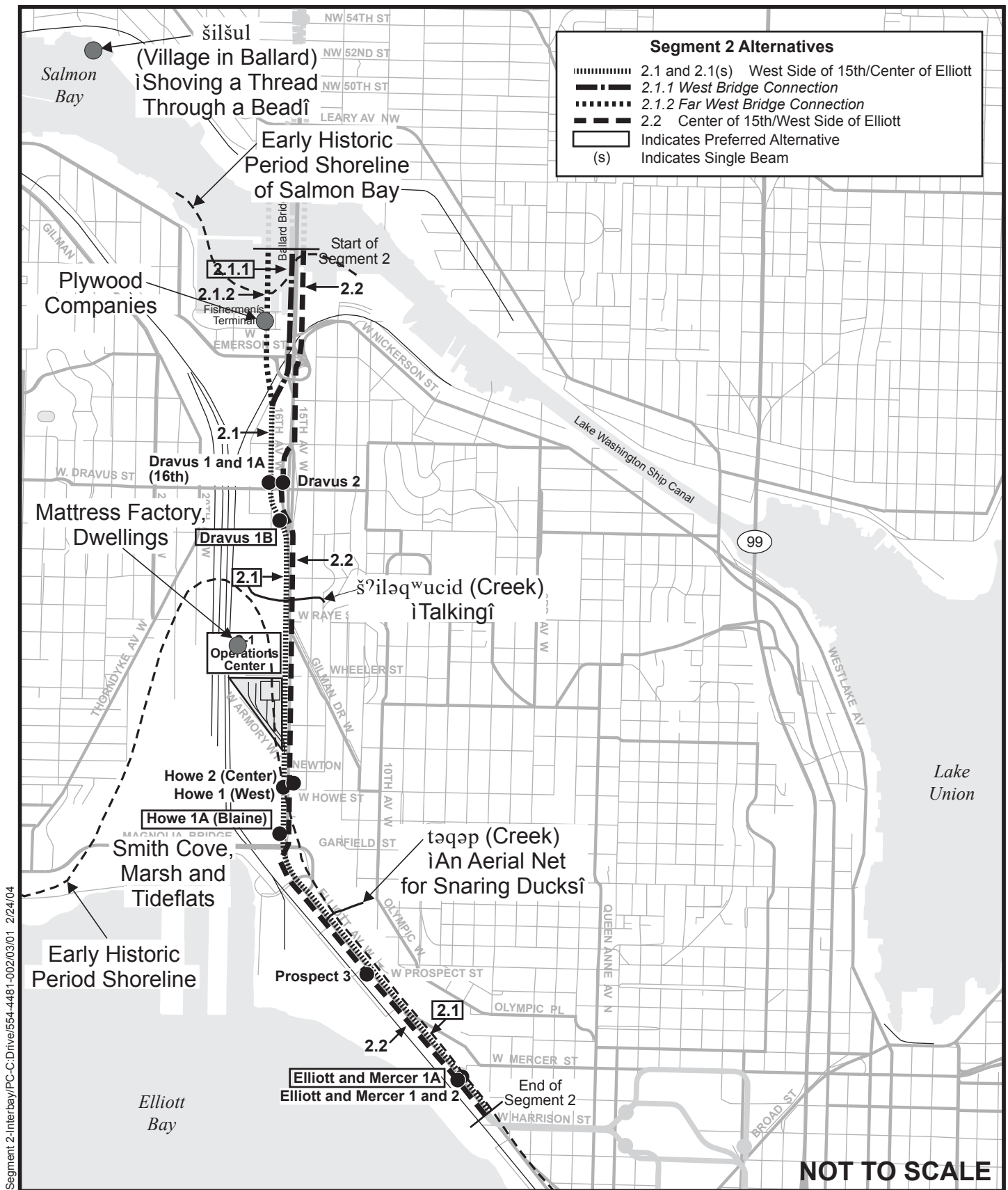


Figure 3 Segment 2: Interbay/Magnolia with Ethnographic Places and Historic Period Environmental and Cultural Features

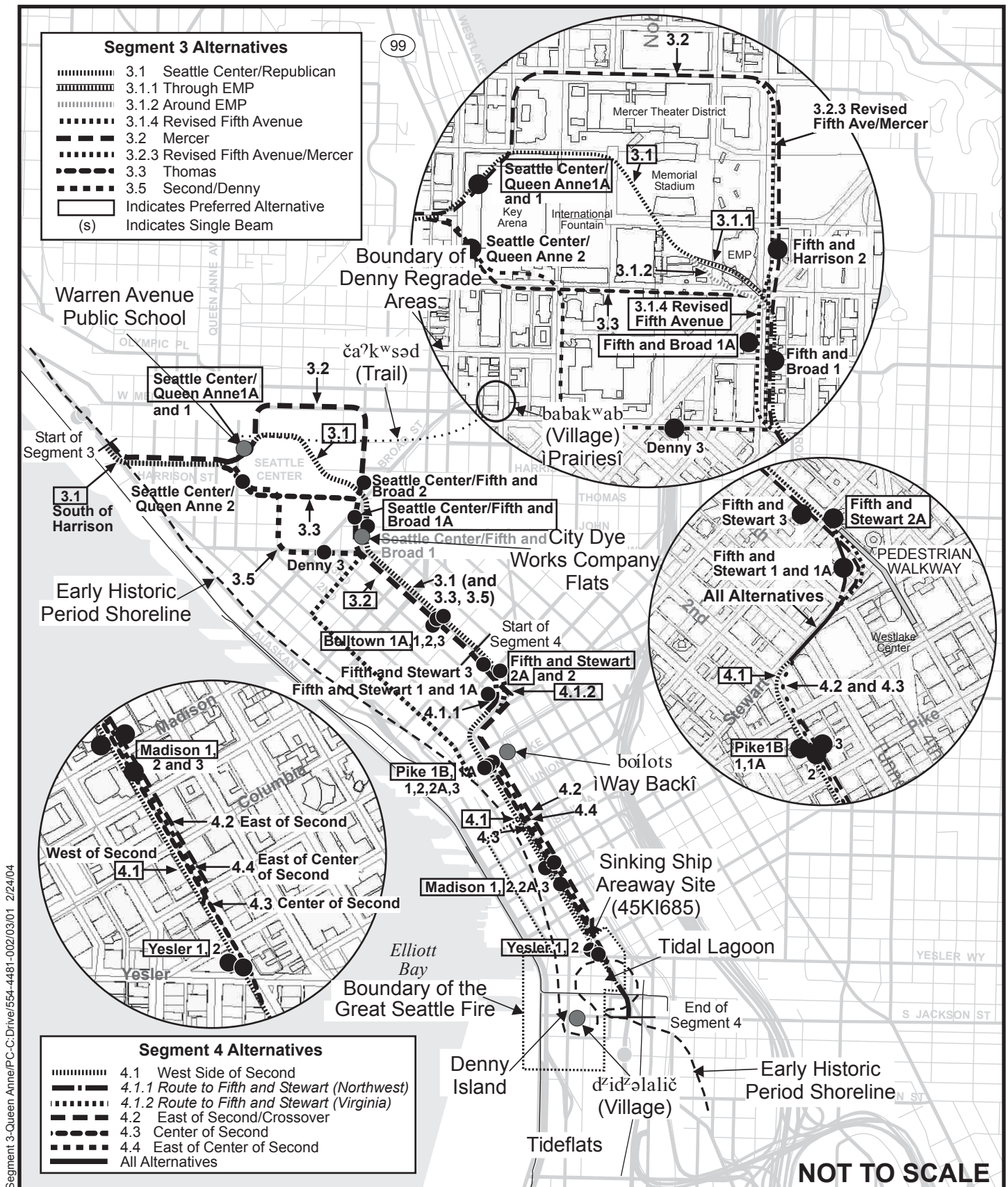


Figure 4
Segment 3: Queen Anne/Seattle Center/Belltown and Segment 4: Downtown/Pioneer Square with Ethnographic Places and Historic Period Environmental and Cultural Features

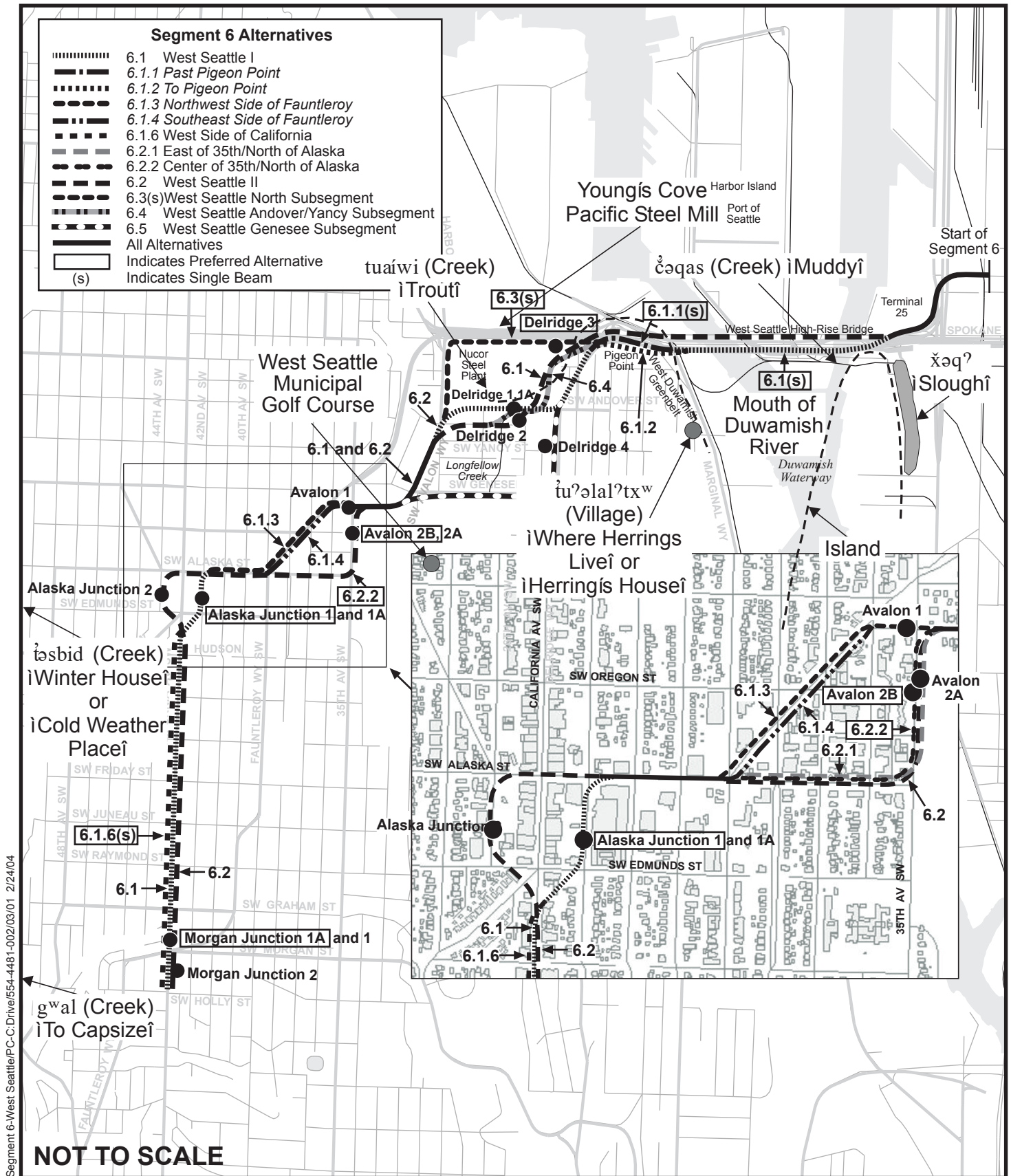


Figure 6
Segment 6: West Seattle
with Ethnographic Places
and Historic Period
Environmental and Cultural
Features

BIBLIOGRAPHY

Abbott, Donald W. and Lynn L. Larson

1984 *Archaeological and Historical Cultural Resources Survey of the Pier 90 and 91 Terminals at Smith Cove*. BOAS Inc. Seattle, Washington.

Anderson Map Company

1904 South Seattle Tide Lands Plat. *The Seattle Star*. 25 November. On file at Special Collections, University of Washington, Seattle.

Austin, C.W. and H.S. Scott

1983 The Great Seattle Fire, June 1889. *Washington State Genealogical and Historical Review* 1(2):41-45. Originally published in 1889 by Puget Sound Printing Company, Tacoma.

Bagley, Clarence B.

1929 *History of King County*, Vol. 1. S.J. Clarke Publishing Company, Seattle.

Ballantyne, Raena and Linda Naoi Goetz

2003 *Atlantic/Central Base Expansion Project Archaeological Monitoring Protocol* Shapiro Project No. 1025023.1T Shapiro and Associates, Seattle, Washington. Report prepared for King county Department of Transportation, Seattle, Washington.

Bass, Sophie Frye

1937 *Pig-Tail Days in Old Seattle*. Binfords and Mort, Portland, Oregon.

Bortelson, G.C., M.J. Chrzastowski, and A. K. Helgersen

1980 *Historical Changes of Shoreline and Wetland at Duwamish River and Elliott Bay, Washington*. Department of the Interior, U.S. Geological Survey, Hydrologic Investigations Atlas HA-617, Sheet 7. Interior-Geological Survey, Reston, Virginia. 1980-L79387.

Bucknam, Robert C.

1998 *Puget Sound Paleoseismology*. U.S. Geological Survey, External Research Program, Reports, Volume 39. URL: <http://erp-web.er.usgs.gov/reports/vol39/pn/36012260.htm>.

Campbell, Sarah K. (editor)

1981 *The Duwamish No. 1 Site: A Lower Puget Sound Shell Midden*. Office of Public Archaeology, Institute for Environmental Studies, University of Washington, Seattle, Research Report No. 1.

Chrzastowski, Michael

- 1981 *Historical Changes to Lake Washington and Route of the Lake Washington Ship Canal, King County, Washington*. Department of the Interior, U.S. Geological Survey, Water Resources Investigation, Open-File Report 81-8112.

Cooper, Jason B., Dennis E. Lewarch, Leonard A. Forsman and Lynn L. Larson

- 1999 *Longfellow Creek Watershed Action Plan Cultural Resource Assessment and Archaeological Monitoring King County, Washington*. Larson Anthropological Archaeological Services Limited, Technical Report #99-07. Submitted to the City of Seattle, Seattle Public Utilities, Seattle, Washington.

Costello, James A.

- 1974 *The Siwash: Their Life Tales and Legends and of Puget Sound and Pacific Northwest*. Reprinted. The Printers, Everett, Washington. Originally published 1895, The Calvert Company, Seattle.

Crow, Joseph W.

- 1926 *Account of the Making of an Indian Doctor*. File IND/MS Soc #3. On file at the Washington State Historical Society Archives, Tacoma.

Denny, Emily Inez

- 1909 *Blazing the Way: True Stories, Songs and Sketches of Puget Sound and other Pioneers*. Rainier Printing Company, Seattle.

Dorpat, Paul and Genevieve McCoy

- 1998 *Building Washington: A History of Washington State Public Works*. Tartu Publications Seattle, Washington.

Downing, John

- 1983 *The Coast of Puget Sound: Its Processes and Development*. Washington Sea Grant Program, University of Washington. University of Washington Press, Seattle.

Dragovich, Joe D., Patrick T. Pringle, and Timothy J. Walsh

- 1994 Extent and Geometry of the Mid-Holocene Osceola Mudflow in the Puget Lowland: Implications for Holocene Sedimentation and Paleogeography. *Washington Geology* 22(3):3-26.

Dugas, Amy E. and Jeffrey R. Robbins

- 2001 *Cultural Resource Monitoring for the Bellora Condominium Project, Seattle, King County, Washington*. Letter report from Compliance Archaeology L. L. C., Seattle, Washington, to Wade Metz, Murray Franklyn Companies, Bellevue, Washington. 17 August.

Earth Technology Corporation

- 1984 *Archaeological Resources Assessment for the Downtown Seattle Transit Tunnel Project*. Earth Technology Corporation, Seattle, Washington. Submitted to Parsons, Brinckerhoff, Quade, and Douglas, Seattle, Washington. Prepared for the Municipality of Metropolitan Seattle, Seattle.

Forsman, Leonard A.

- 1994 *Alki Transfer/CSO Facilities Project Traditional Cultural Property Study Archival Phase*. LAAS Technical Report 93-9. Larson Anthropological/Archaeological Services, Seattle, Washington. Submitted to HDR Engineering, Bellevue, Washington.

Forsman, Leonard A., Paul S. Solimano and Lynn L. Larson

- 1994 *Seattle-Tacoma Commuter Rail Project Cultural Resource Overview*. LAAS Technical Report 94-4. Larson Anthropological/Archaeological Services, Seattle, Washington. Submitted to BRW Inc., Seattle, Washington.

Forsman, Leonard A., Dennis E. Lewarch and Lynn L. Larson

- 1997 *Denny Way/Lake Union Combined Sewer Overflow Control Project, Seattle, King County, Cultural Resources Assessment*. Technical Report No. 96-5. Larson Anthropological/Archaeological Services, Seattle. Submitted to Brown and Caldwell Engineering Consultants, Seattle, and King County Department of Natural Resources, Water Pollution Control, Seattle.

Forsman, Leonard A., Dennis E. Lewarch and Lynn L. Larson

- 1998a *Lake Washington Ship Canal Cultural Resource Assessment Catalog of Known Historical Photographs Identifying Potential Archaeological Sites*. Larson Anthropological Archaeological Services, Seattle. Contract No. DACA67-97-D-1010. Submitted to the U.S. Army Corps of Engineers, Seattle.

Forsman, Leonard A., Dennis E. Lewarch, Michael Madson and Lynn L. Larson

- 1998b *Wall Street Project Cultural Resource Overview Seattle, King County, Washington*. LAAS Technical Report #98-10. Larson Anthropological Archaeological Services Limited, Seattle, Washington. Submitted to Port of Seattle, Seattle, Washington.

Forsman, Leonard A., Dennis E. Lewarch and Lynn L. Larson

- 2000 *Proposed Aspen Murray Hotel/Condominium Project Archaeological and Traditional Cultural Places Overview Seattle, King County, Washington*. LAAS Technical Report #2000-17. Larson Anthropological Archaeological Services Limited, Gig Harbor. Submitted to Murray Franklin, Bellevue, Washington.

Galster, Richard W. and William T. Laprade

- 1991 *Geology of Seattle, Washington, United States of America*. *Bulletin of the Association of Engineering Geologists* 28:235-302.

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Harrington, John P.

ca. *John P. Harrington Papers*. National Anthropological Archives, Smithsonian Institution. Reel 15, 1907-1957. On microfilm at Suzzallo Library, University of Washington, Seattle.

Hart Crowser

1999 *Draft Cultural Resource Research Design Waterfront South Master Plan and Programmatic EIS Programs, Seattle, Washington*. Hart Crowser, Seattle, Washington. Submitted to Shapiro & Associates, Seattle, Washington. Prepared for the Washington State Department of Transportation/Washington State Ferry System, Seattle.

Hart-Crowser and Associates

1986a *Identification of Archaeological Research Topics and Questions for the Downtown Seattle Transit Project*. Hart-Crowser and Associates, Seattle, Washington. Submitted to Parsons, Brinckerhoff, Quade, and Douglas, Seattle, Washington.

1986b *Research Design for Archaeological Test Excavations, Downtown Seattle Transit Project*. Hart-Crowser and Associates, Seattle, Washington. Submitted to Parsons, Brinckerhoff, Quade, and Douglas, Seattle, Washington. Prepared for Municipality of Metropolitan Seattle, Seattle.

Hart Crowser, Incorporated

1998 *Football/Soccer Stadium and Exhibition Center Project, Appendix K: Cultural and Archaeological Resources Technical Report*. Hart Crowser, Incorporated, Seattle, Washington.

Hilbert, Vi, Jay Miller and Zalmai Zahir

2001 *Puget Sound Geography: Original Manuscript from T. T. Waterman*. Zahir Consulting Services, Federal Way, Washington.

Holstine, Craig

1996 *Historic Resources Discipline Report: Washington State Department of Transportation's Proposed SR 519 Kingdome Area Intermodal Assess Project, Seattle, Washington*. Short Report DOT96-14. Archaeological and Historical Services, Eastern Washington University. In fulfillment of the Washington State Department Transportation's Task Assignment Document GG, Contract No. Y5010.

Kennedy, Hal

1985 *The METRO Renton Effluent Transfer System Findings-to-Date, West Marginal Place SW, ETS-8b/9*. Letter from BOAS, Incorporated, to Thomas Delaat, URS Corporation, Seattle, 7 November.

Kreutzer, Lee

- 1993 *Archaeological Assessment of the Proposed Dry Boat Storage Facility and Aquatic Habitat Restoration Site Port of Seattle Terminal 105 Seattle, Washington*. Historical Research Associated Inc., Seattle. Prepared for Vicki Morris Consulting Services Seattle, Washington.

Lane, Barbara

- 1974 *Identity, Treaty Status and Fisheries of the Suquamish Tribe of the Port Madison Reservation*. Report prepared for the U.S. Department of the Interior and the Suquamish Tribe. Ms. on file at Special Collections, Allen Library, University of Washington, Seattle.

- 1987 *Indian Fisheries in Elliott Bay in the Mid-Nineteenth Century*. Preliminary report. On file Muckleshoot Indian Tribe, Auburn, Washington.

Larson, Lynn L.

- 1989 *Seattle Predesign Services for the Alki Transfer/CSO Facilities Project Historical/Archaeological Resources Draft Technical Memorandum*. Larson Anthropological Archaeological Services Limited, Seattle, Washington. Submitted to Molly Adolphson Consulting Environmental Analysts.

Larson, Lynn L. and Dennis E. Lewarch (editors)

- 1995 *The Archaeology of West Point, Seattle, Washington: 4,000 Years of Hunter-Fisher-Gatherer Land Use in Southern Puget Sound*. 2 vols. Larson Anthropological/Archaeological Services, Seattle. Submitted to the King County Department of Metropolitan Services, Seattle.

Larson, Lynn L. and Leonard A. Forsman

- 1996 *Alki Transfer/CSO Facilities Project Traditional Cultural Property Study*. LAAS Technical Report #95-12. Larson Anthropological/Archaeological Services, Seattle, Washington. Report submitted to HDR Engineering Inc., Bellevue, Washington.

Larson, Lynn L. and Paul Solimano

- 1992 *Cultural Resource Assessment Port of Seattle Southwest Harbor Development Project, King County, Washington*. LAAS Technical Report #91-3. Larson Anthropological/Archaeological Services, Seattle. Submitted to Parametrix, Inc. Bellevue, Washington.

Lewarch, Dennis E. and Gretchen A. Kaehler

- 2003 *45K1685. Sinking Ship Areaway Washington State Inventory Site Form*. On file at the Washington State Office of Archaeology and Historic Preservation, Olympia, Washington.

Archaeological Resources Assessment of the Seattle Monorail Green Line Project

Lewarch, Dennis E. and Lynn L. Larson

1998 *Update on Archaeological Test Excavations and Construction Excavation Monitoring of 45K1456, the Baba 'k^wob Site, at the World Trade Center Construction Site as of March 20, 1998.* Memorandum from Larson Anthropological/Archaeological Services, Seattle, Washington, to Doug Hotchkiss, Port of Seattle, Seattle, Washington, 8 May.

Lewarch, Dennis E., Leonard A. Forsman, and Lynn L. Larson

1999 *Denny/Lake Union Combined Sewer Overflow Control Project Seattle, King County Archaeological Resources Treatment and Monitoring Plans.* Submitted to Bellevue, Washington. Prepared for King County Department of Natural Resources, Wastewater Treatment Division, Seattle, Washington.

Lewarch, Dennis, E., Lynn L. Larson, Leonard A. Forsman, Laura R. Murphy, David R. Iversen, Jeffrey Robbins and Amy E. Dugas

2002 *Archaeological Evaluation and Construction Excavation Monitoring at the World Trade Center, Baba 'k^wob Site (45K1456), Seattle, King County, Washington.* LAAS Technical Report #2002-15. Larson Anthropological Archaeological Services Limited, Gig harbor, Washington. Submitted to Port of Seattle, Seattle.

Liddle, Janet

1999 *Results of Cultural Resource Monitoring for the World Trade Center North.* Letter report from Northwest Archaeological Associates, Incorporated, Seattle, Washington, to Hamilton Hazelhurst, Wright-Runstad and Company, Seattle, Washington. 30 September.

Louis Berger and Associates, Inc.

1992 *Phase 1A Cultural Resource Investigations of Proposed Federal Detention Center Sites King County Washington.* Louis Berger and Associates Inc. Washington, D.C. Prepared for U.S. Department of Justice Federal Bureau of Prisons, Washington, D.C.

Maass, Alex

2000 *Cultural Resources Technical Memorandum for the Atlantic/Central Bus Base Expansion.* Historical Research Associates Inc., Seattle, Washington. Prepared for Huckell/Weinman Associates, Inc., Kirkland, Washington.

Miss, Christian J.

1998 *King Street Center Archaeological Assessment and Monitoring.* Letter report from Northwest Archaeological Associates, Incorporated, Seattle, Washington, to Cindy Edens, Wright Runstad & Company, Seattle, Washington, 27 May.

Morse, Roy W.

1989 *Regrading Years in Seattle. Washington Division of Geology and Earth Resources Bulletin 78:691-702.*

Nelson, Meg

- 1998 *Investigation of Recent Excavation for Seismic Retrofitting at the King County Administration Building*. Letter report from Northwest Archaeological Associates, Incorporated, Seattle, Washington, to Stephen Swinburne, Department of Construction and Facility Management, King County Administration Building, Seattle, Washington. 4 December.

Northwest Archaeological Associates Inc.

- 1998a *Cultural Resources Monitoring and Discovery Plan for the King Street Center Property*. Prepared for Wright-Runstad and Company, Seattle, Washington.
- 1998b *Cultural Resource Monitoring and Discovery Plan for the Washington State Exhibition Center and Parking Garage*. Prepared for Turner Construction Company, Seattle, Washington
- 1998c *Review of Potential Archaeological Remains on the King Street Center Property*. Prepared for Wright-Runstad and Company, Seattle, Washington.

Petite, Irving

- 1954 Old Indian Village Sites of Seattle and Vicinity. *The Seattle Times* 10 January:10.

Phelps, Myra L.

- 1978 *Public Works in Seattle: A Narrative History, The Engineering Department 1875-1975*. Seattle Engineering Department, Kingsport Press, Seattle, Washington.

Porter, Stephen C. and Terry W. Swanson

- 1998 Radiocarbon Age Constraints on Rates of Advance and Retreat of the Puget Lobe of the Cordilleran Ice Sheet during the Last Glaciation. *Quaternary Research* 50:205-213.

Rader, Bert

- n.d. *Archaeological Monitoring of Exploratory Trenches Puget Creek Estuary Restoration Port of Seattle, King County, Seattle, Washington*. United States Army Corps of Engineers, Seattle District, Seattle. Prepared for Port of Seattle, Seattle.

Reinartz, Kay F.

- 1988 From Forest Primeval to Farmdale Homestead. In *Passport to Ballard, the Centennial Story*. Ballard News Tribune: a division of Newspaper Enterprises of Washington State Company, Seattle, Washington.

Rice, Harvey S., Bryn Thomas and Joan Robinson

- 1989 *A Cultural Resources Investigation of the Port of Seattle Terminal 108 Property*. Short Report 201. Archaeological and Historical Services Eastern Washington University. In fulfillment of an Agreement between Archaeological and Historical Services, Eastern Washington University and Port of Seattle.

Robbins, Jeffrey R. and Lynn L. Larson

1995 *South Spokane Street Viaduct Widening Project Cultural Resource Assessment Seattle, Washington*. Larson Anthropological/Archaeological Services, Seattle, Washington. LAAS Technical Report #94-6. Prepared for Tudor Engineering, Seattle. Submitted to South Spokane Street Team, Seattle, Washington.

Robbins, Jeffrey R. and Lynn L. Larson

1998 *Cultural Resource Monitoring Alki Transfer/CSO Facilities Project Northern Transfer Project*. LAAS Technical Report #98-09. Larson Anthropological Archaeological Services Limited, Seattle, Washington. Submitted to HDR Engineering, Inc., Bellevue, Washington.

Robinson, Joan

1982 *I-90 Seattle Access Study*. Letter report on file at Washington Office of Archaeology and Historic Preservation, Olympia, Washington.

Roedel, Kurt W., Dennis E. Lewarch, and Lynn L. Larson

2003 *SR 99: Alaskan Way Viaduct and Seawall Replacement Project, Final Archaeological Resources and Monitoring and Review of Geotechnical Borings*. Larson Anthropological Archaeological Services Limited, Gig Harbor, Washington. LAAS Technical Report # 2003-03. Submitted to Parsons Brinckerhoff Quade & Douglas, Incorporated, Seattle.

Sanborn Map and Publishing Company

1884 *Insurance Maps of Seattle, Washington Territory*. Sanborn Map Company, New York.

Sanborn Map Company

1888 *Insurance Maps of Seattle, Washington*. Sanborn Map Company, New York.

1905 *Insurance Maps of Seattle, Washington*. Sanborn Map Company, New York.

1917 *Insurance Maps of Seattle, Washington*. Sanborn Map Company, New York.

1930 *Insurance Maps of Seattle, Washington*. Sanborn Map Company, New York.

1936 *Insurance Maps of Seattle, Washington*. Sanborn Map Company, New York.

1944 *Insurance Maps of Seattle, Washington*. Sanborn Map Company, New York.

1948 *Insurance Maps of Seattle, Washington*. Sanborn Map Company, New York.

Sanborn Perris Map and Publishing Company

1893 *Insurance Maps of Seattle, Washington*. Sanborn-Perris Map Company, New York.

Shong, Michael V. and Lynn L. Larson

1997 *Terminal 18 Shoreline Public Access and Landscape Project Port of Seattle, Seattle, Washington Cultural Resource Assessment*. Larson Anthropological/Archaeological Services, Seattle, Washington. LAAS Technical Report #97-11. Submitted to Susan Black and Associates, Seattle, Washington. Prepared for the Port of Seattle, Seattle, Washington.

Solimano, Paul S., Lynn L. Larson, and Dennis E. Lewarch

1993 *Cultural Resource Testing 45KI432, Alki Transfer/CSO Project, West Seattle Pump Station, King County Washington*. Larson Anthropological/Archaeological Services, Seattle, Washington. LAAS Technical Report No. 93-7. Prepared for the Municipality of Metropolitan Seattle, Seattle, Washington.

Smith Marian W.

1989 Marian Wesley Smith Collection. Add. MSS 2794, microfilmed on behalf of the National Archives of Canada with the kind permission of the Royal Anthropological Institute, on file at the British Columbia Archives and Record Service, Victoria, British Columbia, Canada. MS 268, ca. 1922-1958, original notes at Royal Anthropological Institute, London, England.

Stevens, Isaac I.

1854 Report on Tribes between the Head of Navigation of the Mississippi River to the Pacific Ocean: Indian Tribes West of the Cascades. Letter from Isaac I. Stevens, Governor and Superintendent of Indian Affairs, Washington Territory to George W. Manypenny, Commissioner of Indian Affairs, Washington, D.C., 16 September. In *Message from the President of the United States to the Two Houses of Congress at the Commencement of the Second Session of the Thirty-Third Congress, Part 1*, pp. 392-459. A.O.P. Nicholson Printer, Washington, D.C.

Thompson, Nile

1988 The Original Residents of Shilshole Bay. In *Passport to Ballard*, by Ballard News Tribune, pp. 10-16. Ballard News Tribune, Seattle.

Tobin, Caroline and Hart-Crowser

1994 *Draft Environmental Impact Statement for the Seattle Commons/South Lake Union Plan: Technical Appendix 15: Historic and Cultural Resources Study*. Caroline Tobin and Hart-Crowser, Seattle, Washington. Prepared for NBBJ, Seattle, Washington. Submitted to HDR Engineering, Bellevue, Washington. Submitted to the City of Seattle Office of Management and Planning.

United States Coast and Geodetic Survey

1889 *Seattle Harbor, Puget Sound, Washington Territory*. United States Coast and Geodetic Survey Map 651.

United States Court of Claims

1927a *Number of Duwamish Villages on White River Valley*. Claimants Exhibit W-2. In The Duwamish et al. Tribes of Indians vs. The United States of America, Proceedings of the United States Court of Claims, No. F-275, filed October 3, 1927. Records of the U.S. Court of Claims No. F-275. On file at the National Archives and Records Administration, Washington, D.C.

1927b *Villages of the Duwamish at Lake Washington*. Claimants Exhibit Y-2. In The Duwamish et al. Tribes of Indians vs. The United States of America, Proceedings of the United States Court of Claims, No. F-275, filed October 3, 1927. Records of the U.S. Court of Claims No. F-275. On file at the National Archives and Records Administration, Washington, D.C.

United States Geological Survey

1982 *Seattle South Quadrangle*. United States Geological Survey, Denver, Colorado.

1983 *Seattle North Quadrangle*. United States Geological Survey, Denver, Colorado.

United States Surveyor General

1856 General Land Office Map, Township 25, Range 3 East, Willamette Meridian, Washington Department of Natural Resources, Olympia.

1863 General Land Office Map, Township 25, Range 4 East, Willamette Meridian, Washington Department of Natural Resources, Olympia.

URS Corporation and BOAS, Incorporated

1987 *The Duwamish No. 1 Site, 1986 Data Recovery*. URS Corporation, Seattle, and BOAS, Incorporated, Seattle. Submitted to the Municipality of Metropolitan Seattle (METRO), Contract No. CW/F2-82, Task 48.08.

Wandry, Margaret I.

1975 *Four Bridges to Seattle: Old Ballard 1853-1907*. Ballard Printing and Publishing, Seattle, Washington.

Waterman, T.T.

ca. *Puget Sound Geography*. Unpublished manuscript on file Pacific Northwest 1920 Collection, Allen Library, University of Washington, Seattle.

1922 Geographic Names Used by Indians of the Pacific Coast. *Geographical Review* 12:175-194.

Watt, Roberta Frye

1931 *Four Wagons West, the Story of Seattle*. Binfords and Mort, Publishers, Portland, Oregon.

Weaver, Robert M.

1997 *Seattle Football Stadium EIS Cultural Resources*. Letter report from Hart Crowser, Incorporated, Seattle, Washington, to Charlie Sigo and Richard Brooks, Suquamish Tribe, Suquamish, Washington, 15 December.

Wessen, Gary, Joan M. Robinson and M. Leland Stilson

1988 *U.S. Sprint Fiber optic Cable Project Seattle, Washington, to Spokane, Washington*. Addendum #3 to the Technical Report. Dames and Moore, Seattle, Washington. Prepared for U.S. Sprint.

West Seattle Herald

1987 *West Side Story*. West Seattle Herald/White Center News, Robinson Newspapers, Seattle.

APPENDIX 1

INDIVIDUALS AND AGENCIES CONTACTED

Individuals and Agencies Contacted

Gobin, Hank, Cultural Resources Manager, Tulalip Tribes, telephone, April 17, 2003.

Hill, Zee, Office Manager, Washington State Office of Archaeology and Historic Preservation, April 21, 2003.

Hogerhuis, Donna, Cultural Specialist, Muckleshoot Indian Tribe, telephone, April 22, 2003.

Rasmussen, James, Tribal Council Member, Duwamish Tribe, telephone, May 27, 2003.

Sigo, Charlie, Tribal Curator, Suquamish Tribe, meeting, May 21, 2003.

APPENDIX 2

TRIBAL CORRESPONDENCE

SEATTLE MONORAIL PROJECT

RECEIVED

MAY 1 2 2003

ENTRIX seattle

April 2, 2003

Honorable John Daniels, Jr.
Chairperson
Muckleshoot Tribe
39015 172nd Avenue SE
Auburn, Washington 98092

Re: Seattle Monorail Project
U. S. Coast Guard NEPA Scoping Meeting and Section 106 Consultation on
Archaeological and Traditional Cultural Property

Dear Chairperson Daniels:

This letter is a reminder about the United States Coast Guard NEPA scoping meeting for the Seattle Monorail Project's proposed Green Line and an invitation to participate in the upcoming Section 106 and Endangered Species Act (ESA) consultations for the Green Line. In addition to the National Register notice and the informal email notices we have sent the Tribe, I wanted to more formally invite you to participate in the Coast Guard's scoping process, either by attending the April 9 scoping meeting, by sending written comments to the Coast Guard, or by consulting with us in the upcoming Section 106 process. That meeting will be held at the offices of the Seattle Monorail Project, 1904 Second Avenue, Suite 105, Seattle, Washington 98101, on April 9, 2003 from 10:00 AM to noon.

The proposed monorail Green Line was approved by Seattle voters in November 2002. The Seattle Monorail Project is the agency that is planning for the construction of the Green Line, which is proposed to connect the Seattle neighborhoods of Ballard, Interbay, Queen Anne/Seattle Center, Belltown, Downtown, SODO, and West Seattle. The north end of the proposed Green Line is at NW 85th Street and 15th Avenue NW in Greenwood. The Green Line would run south along 15th Avenue NW and cross Salmon Bay via an elevated bridge adjacent to the existing Ballard Bridge. The Green Line would continue south on or adjacent to 15th Avenue West, turn east on West Harrison Street to Seattle Center. From the Seattle Center the Green Line would continue south through Downtown Seattle via Fifth Avenue, Stewart Street, and Second Avenue. South of the Pioneer Square area, the Green Line would roughly continue along Third Avenue South, South Lander Street, Utah Avenue South, South Horton Street, East Marginal Way South, and Southwest Spokane Street. The proposed Green Line would cross the Duwamish Waterway on the existing West Seattle Bridge and continue through West Seattle on Southwest Avalon Way, Alaska Way Southwest, and California Avenue Southwest. The south end of the Green Line would be at California Avenue Southwest and Southwest Morgan Street.

The Green Line will consist of monorail beams, support columns, special structures, water crossings, stations and a maintenance facility. Most of the proposed ground disturbance would be associated with ground excavation for the foundations supporting the support columns and special support structures, construction of the stations and construction of the maintenance facility. The proposed Green Line presently calls for placing support columns spaced on the average of 120 feet apart. The current proposal also calls for construction of nineteen stations and one operations facility, which would be near the Green Line in either the SODO or Interbay neighborhood. The only work in navigable water that is contemplated would be the construction of the new monorail-only bridge over Salmon Bay near the existing Ballard Bridge.

The Seattle Monorail Project is cooperating with the United States Coast Guard to prepare a joint environmental impact statement (EIS) to satisfy both the requirements of the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA) for the proposed Green Line. The lead federal agency is the Coast Guard, which must approve the bridge crossing at Salmon Bay. Because the Coast Guard permitting is a federal undertaking, it is subject to the consultation requirements of Section 106 of the National Historic Preservation Act and the consultation requirements under the ESA. The Coast Guard is authorizing the Seattle Monorail Project to initiate both the Section 106 consultation and the ESA consultation.

We anticipate that Larson Anthropological Archaeological Services Limited (LAAS) and Parametrix Inc. will be assisting us with the Section 106 consultation. An important part of that process will be consultation with tribes to gather information on traditional cultural use areas and to identify significant cultural resources in the Monorail Green Line project area. We are aware that the Muckleshoot Tribe may have information gathered from elders regarding the project area and/or the Tribe may currently use areas for traditional cultural activities near the proposed project. We encourage the Muckleshoot Tribe's cultural representative to contact us if the Tribe has information that might be useful in the overview, or if the Tribe has comments or concerns regarding the project area. We also understand that traditional cultural use areas are private, but would welcome the opportunity to work with the Tribe regarding incorporation of this type of information in a secure and respectful manner.

We anticipate that Anchor Environmental and Ms. Tracey McKenzie and Parametrix Inc. and Dr. Don Weitkamp will be assisting us with the ESA consultation. An important part of that process will be consultation with tribes to gather information on the salmon and other fisheries resources in the area of the proposed project, especially in the area of the proposed bridge near the existing Ballard Bridge. We encourage the Muckleshoot Tribe's environmental and fisheries representative to contact us with any comments or concerns regarding the project area.

Please contact Helene Kornblatt at the Seattle Monorail Project (phone: 206-382-1220; email: helene@elevated.org) or Leonard Forsman at LAAS (phone: 1-888-631-6131; email: lforsman.laas@attglobal.net) or Tracey McKenzie (phone: 206 287-9130; email:

tmckenzie@anchorenv.com) at your earliest convenience if you would like to discuss these matters further. You may also send comments directly to the United States Coast Guard to Austin Pratt, 13th Coast Guard District, 915 Second Avenue, Room 3510, Seattle WA 98174-1067. Otherwise, we will contact the Tribe's cultural, environmental and fisheries representatives within the next few weeks.

Sincerely,

A handwritten signature in black ink, appearing to read "Ross Macfarlane", written over a large, loopy cursive flourish.

Ross Macfarlane,
Director of Legal and Environmental Affairs

cc: Allyson Brooks, State Historic Preservation Officer
Helene Kornblatt, Seattle Monorail Project
Leonard Forsman, LAAS
Austin Pratt, United States Coast Guard
Tracey McKenzie, Anchor Environmental

SEATTLE MONORAIL PROJECT

RECEIVED

MAY 12 2003

ENTRIX

April 2, 2003

Honorable Herman A. Williams, Jr.
Chairperson
Tulalip Tribe
6700 Totem Beach Road
Marysville, Washington 98270

Re: Seattle Monorail Project
U. S. Coast Guard NEPA Scoping Meeting and Section 106 Consultation on
Archaeological and Traditional Cultural Property

Dear Chairperson Williams:

This letter is a reminder about the United States Coast Guard NEPA scoping meeting for the Seattle Monorail Project's proposed Green Line and an invitation to participate in the upcoming Section 106 and Endangered Species Act (ESA) consultations for the Green Line. In addition to the National Register notice and the informal email notices we have sent the Tribe, I wanted to more formally invite you to participate in the Coast Guard's scoping process, either by attending the April 9 scoping meeting, by sending written comments to the Coast Guard, or by consulting with us in the upcoming Section 106 process. That meeting will be held at the offices of the Seattle Monorail Project, 1904 Second Avenue, Suite 105, Seattle, Washington 98101, on April 9, 2003 from 10:00 AM to noon.

The proposed monorail Green Line was approved by Seattle voters in November 2002. The Seattle Monorail Project is the agency that is planning for the construction of the Green Line, which is proposed to connect the Seattle neighborhoods of Ballard, Interbay, Queen Anne/Seattle Center, Belltown, Downtown, SODO, and West Seattle. The north end of the proposed Green Line is at NW 85th Street and 15th Avenue NW in Greenwood. The Green Line would run south along 15th Avenue NW and cross Salmon Bay via an elevated bridge adjacent to the existing Ballard Bridge. The Green Line would continue south on or adjacent to 15th Avenue West, turn east on West Harrison Street to Seattle Center. From the Seattle Center the Green Line would continue south through Downtown Seattle via Fifth Avenue, Stewart Street, and Second Avenue. South of the Pioneer Square area, the Green Line would roughly continue along Third Avenue South, South Lander Street, Utah Avenue South, South Horton Street, East Marginal Way South, and Southwest Spokane Street. The proposed Green Line would cross the Duwamish Waterway on the existing West Seattle Bridge and continue through West Seattle on Southwest Avalon Way, Alaska Way Southwest, and California Avenue Southwest. The south end of the Green Line would be at California Avenue Southwest and Southwest Morgan Street.

The Green Line will consist of monorail beams, support columns, special structures, water crossings, stations and a maintenance facility. Most of the proposed ground disturbance would be associated with ground excavation for the foundations supporting the support columns and special support structures, construction of the stations and construction of the maintenance facility. The proposed Green Line presently calls for placing support columns spaced on the average of 120 feet apart. The current proposal also calls for construction of nineteen stations and one operations facility, which would be near the Green Line in either the SODO or Interbay neighborhood. The only work in navigable water that is contemplated would be the construction of the new monorail-only bridge over Salmon Bay near the existing Ballard Bridge.

The Seattle Monorail Project is cooperating with the United States Coast Guard to prepare a joint environmental impact statement (EIS) to satisfy both the requirements of the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA) for the proposed Green Line. The lead federal agency is the Coast Guard, which must approve the bridge crossing at Salmon Bay. Because the Coast Guard permitting is a federal undertaking, it is subject to the consultation requirements of Section 106 of the National Historic Preservation Act and the consultation requirements under the ESA. The Coast Guard is authorizing the Seattle Monorail Project to initiate both the Section 106 consultation and the ESA consultation.

We anticipate that Larson Anthropological Archaeological Services Limited (LAAS) and Parametrix Inc. will be assisting us with the Section 106 consultation. An important part of that process will be consultation with tribes to gather information on traditional cultural use areas and to identify significant cultural resources in the Monorail Green Line project area. We are aware that the Tulalip Tribe may have information gathered from elders regarding the project area and/or the Tribe may currently use areas for traditional cultural activities near the proposed project. We encourage the Tulalip Tribe's cultural representative to contact us if the Tribe has information that might be useful in the overview, or if the Tribe has comments or concerns regarding the project area. We also understand that traditional cultural use areas are private, but would welcome the opportunity to work with the Tribe regarding incorporation of this type of information in a secure and respectful manner.

We anticipate that Anchor Environmental and Ms. Tracey McKenzie and Parametrix Inc. and Dr. Don Weitkamp will be assisting us with the ESA consultation. An important part of that process will be consultation with tribes to gather information on the salmon and other fisheries resources in the area of the proposed project, especially in the area of the proposed bridge near the existing Ballard Bridge. We encourage the Tulalip Tribe's environmental and fisheries representative to contact us with any comments or concerns regarding the project area.

Please contact Helene Kornblatt at the Seattle Monorail Project (phone: 206-382-1220; email: helene@elevated.org) or Leonard Forsman at LAAS (phone: 1-888-631-6131; email:

lforsman.laas@attglobal.net) or Tracey McKenzie (phone: 206 287-9130; email: tmckenzie@anchorenv.com) at your earliest convenience if you would like to discuss these matters further. You may also send comments directly to the United States Coast Guard to Austin Pratt, 13th Coast Guard District, 915 Second Avenue, Room 3510, Seattle WA 98174-1067. Otherwise, we will contact the Tribe's cultural, environmental and fisheries representatives within the next few weeks.

Sincerely,



Ross Macfarlane

Director of Legal and Environmental Affairs
Seattle Monorail Project

cc: Allyson Brooks, State Historic Preservation Officer
Helene Kornblatt, Seattle Monorail Project
Leonard Forsman, LAAS
Austin Pratt, United States Coast Guard
Tracey McKenzie, Anchor Environmental

SEATTLE MONORAIL PROJECT

RECEIVED

MAY 12 2003

FAT

April 2, 2003

Honorable Bennie J. Armstrong
Chairperson
Suquamish Tribe
P.O. Box 498
Suquamish, Washington 98392

Re: Seattle Monorail Project
U. S. Coast Guard NEPA Scoping Meeting and Section 106 Consultation on
Archaeological and Traditional Cultural Property

Dear Chairperson Armstrong:

This letter is a reminder about the United States Coast Guard NEPA scoping meeting for the Seattle Monorail Project's proposed Green Line and an invitation to participate in the upcoming Section 106 and Endangered Species Act (ESA) consultations for the Green Line. In addition to the National Register notice and the informal email notices we have sent the Tribe, I wanted to more formally invite you to participate in the Coast Guard's scoping process, either by attending the April 9 scoping meeting, by sending written comments to the Coast Guard, or by consulting with us in the upcoming Section 106 process. That meeting will be held at the offices of the Seattle Monorail Project, 1904 Second Avenue, Suite 105, Seattle, Washington 98101, on April 9, 2003 from 10:00 AM to noon.

The proposed monorail Green Line was approved by Seattle voters in November 2002. The Seattle Monorail Project is the agency that is planning for the construction of the Green Line, which is proposed to connect the Seattle neighborhoods of Ballard, Interbay, Queen Anne/Seattle Center, Belltown, Downtown, SODO, and West Seattle. The north end of the proposed Green Line is at NW 85th Street and 15th Avenue NW in Greenwood. The Green Line would run south along 15th Avenue NW and cross Salmon Bay via an elevated bridge adjacent to the existing Ballard Bridge. The Green Line would continue south on or adjacent to 15th Avenue West, turn east on West Harrison Street to Seattle Center. From the Seattle Center the Green Line would continue south through Downtown Seattle via Fifth Avenue, Stewart Street, and Second Avenue. South of the Pioneer Square area, the Green Line would roughly continue along Third Avenue South, South Lander Street, Utah Avenue South, South Horton Street, East Marginal Way South, and Southwest Spokane Street. The proposed Green Line would cross the Duwamish Waterway on the existing West Seattle Bridge and continue through West Seattle on Southwest Avalon Way, Alaska Way Southwest, and California Avenue Southwest. The south end of the Green Line would be at California Avenue Southwest and Southwest Morgan Street.

The Green Line will consist of monorail beams, support columns, special structures, water crossings, stations and a maintenance facility. Most of the proposed ground disturbance would be associated with ground excavation for the foundations supporting the support columns and special support structures, construction of the stations and construction of the maintenance facility. The proposed Green Line presently calls for placing support columns spaced on the average of 120 feet apart. The current proposal also calls for construction of nineteen stations and one operations facility, which would be near the Green Line in either the SODO or Interbay neighborhood. The only work in navigable water that is contemplated would be the construction of the new monorail-only bridge over Salmon Bay near the existing Ballard Bridge.

The Seattle Monorail Project is cooperating with the United States Coast Guard to prepare a joint environmental impact statement (EIS) to satisfy both the requirements of the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA) for the proposed Green Line. The lead federal agency is the Coast Guard, which must approve the bridge crossing at Salmon Bay. Because the Coast Guard permitting is a federal undertaking, it is subject to the consultation requirements of Section 106 of the National Historic Preservation Act and the consultation requirements under the ESA. The Coast Guard is authorizing the Seattle Monorail Project to initiate both the Section 106 consultation and the ESA consultation.

We anticipate that Larson Anthropological Archaeological Services Limited (LAAS) and Parametrix Inc. will be assisting us with the Section 106 consultation. An important part of that process will be consultation with tribes to gather information on traditional cultural use areas and to identify significant cultural resources in the Monorail Green Line project area. We are aware that the Suquamish Tribe may have information gathered from elders regarding the project area and/or the Tribe may currently use areas for traditional cultural activities near the proposed project. We encourage the Suquamish Tribe's cultural representative to contact us if the Tribe has information that might be useful in the overview, or if the Tribe has comments or concerns regarding the project area. We also understand that traditional cultural use areas are private, but would welcome the opportunity to work with the Tribe regarding incorporation of this type of information in a secure and respectful manner.

We anticipate that Anchor Environmental and Ms. Tracey McKenzie and Parametrix Inc. and Dr. Don Weitkamp will be assisting us with the ESA consultation. An important part of that process will be consultation with tribes to gather information on the salmon and other fisheries resources in the area of the proposed project, especially in the area of the proposed bridge near the existing Ballard Bridge. We encourage the Suquamish Tribe's environmental and fisheries representative to contact us with any comments or concerns regarding the project area.

Please contact Helene Kornblatt at the Seattle Monorail Project (phone: 206-382-1220; email: helene@elevated.org) or Leonard Forsman at LAAS (phone: 1-888-631-6131; email: lforsman.laas@attglobal.net) or Tracey McKenzie (phone: 206 287-9130; email:

tmckenzie@anchorenv.com) at your earliest convenience if you would like to discuss these matters further. You may also send comments directly to the United States Coast Guard to Austin Pratt, 13th Coast Guard District, 915 Second Avenue, Room 3510, Seattle WA 98174-1067. Otherwise, we will contact the Tribe's cultural, environmental and fisheries representatives within the next few weeks.

Sincerely,

A handwritten signature in black ink, appearing to read "Ross Macfarlane", with a long horizontal flourish extending to the right.

Ross Macfarlane,
Director of Legal and Environmental Affairs

cc: Allyson Brooks, State Historic Preservation Officer
Helene Kornblatt, Seattle Monorail Project
Leonard Forsman, LAAS
Austin Pratt, United States Coast Guard
Tracey McKenzie, Anchor Environmental

SEATTLE MONORAIL PROJECT

RECEIVED

MAY 12 2003

April 2, 2003

Honorable Cecile Hansen
Chairperson
Duwamish Tribe
140 Rainier Avenue South, Suite 6
Renton, Washington 98055-2000

Re: Seattle Monorail Project
U. S. Coast Guard NEPA Scoping Meeting, Section 106 Consultation on
Archaeological and Traditional Cultural Property, and ESA Consultation on
Endangered or Threatened Species

Dear Chairperson Hansen:

This letter is a reminder about the United States Coast Guard NEPA scoping meeting for the Seattle Monorail Project's proposed Green Line and an invitation to participate in the upcoming Section 106 and Endangered Species Act (ESA) consultations for the Green Line. In addition to the National Register notice and the informal email notices we have sent the Tribe, I wanted to more formally invite you to participate in the Coast Guard's scoping process, either by attending the April 9 scoping meeting, by sending written comments to the Coast Guard, or by consulting with us in the upcoming Section 106 process. That meeting will be held at the offices of the Seattle Monorail Project, 1904 Second Avenue, Suite 105, Seattle, Washington 98101, on April 9, 2003 from 10:00 AM to noon.

The proposed monorail Green Line was approved by Seattle voters in November 2002. The Seattle Monorail Project is the agency that is planning for the construction of the Green Line, which is proposed to connect the Seattle neighborhoods of Ballard, Interbay, Queen Anne/Seattle Center, Belltown, Downtown, Sodo, and West Seattle. The north end of the proposed Green Line is at NW 85th Street and 15th Avenue NW in Greenwood. The Green Line would run south along 15th Avenue NW and cross Salmon Bay via an elevated bridge adjacent to the existing Ballard Bridge. The Green Line would continue south on or adjacent to 15th Avenue West, turn east on West Harrison Street to Seattle Center. From the Seattle Center the Green Line would continue south through Downtown Seattle via Fifth Avenue, Stewart Street, and Second Avenue. South of the Pioneer Square area, the Green Line would roughly continue along Third Avenue South, South Lander Street, Utah Avenue South, South Horton Street, East Marginal Way South, and Southwest Spokane Street. The proposed Green Line would cross the Duwamish Waterway on the existing West Seattle Bridge and continue through West Seattle on Southwest Avalon Way, Alaska Way Southwest, and California Avenue Southwest. The south end of the Green Line would be at California Avenue Southwest and Southwest Morgan Street.

The Green Line will consist of monorail beams, support columns, special structures, water crossings, stations and a maintenance facility. Most of the proposed ground disturbance would be associated with ground excavation for the foundations supporting the support columns and special support structures, construction of the stations and construction of the maintenance facility. The proposed Green Line presently calls for placing support columns spaced on the average of 120 feet apart. The current proposal also calls for construction of nineteen stations and one operations facility, which would be near the Green Line in either the SODO or Interbay neighborhood. The only work in navigable water that is contemplated would be the construction of the new monorail-only bridge over Salmon Bay near the existing Ballard Bridge.

The Seattle Monorail Project is cooperating with the United States Coast Guard to prepare a joint environmental impact statement (EIS) to satisfy both the requirements of the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA) for the proposed Green Line. The lead federal agency is the Coast Guard, which must approve the bridge crossing at Salmon Bay. Because the Coast Guard permitting is a federal undertaking, it is subject to the consultation requirements of Section 106 of the National Historic Preservation Act and the consultation requirements under the ESA. The Coast Guard is authorizing the Seattle Monorail Project to initiate both the Section 106 consultation and the ESA consultation.

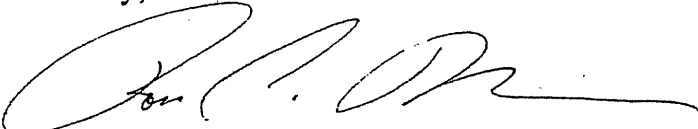
We anticipate that Larson Anthropological Archaeological Services Limited (LAAS) and Parametrix Inc. will be assisting us with the Section 106 consultation. An important part of that process will be consultation with tribes to gather information on traditional cultural use areas and to identify significant cultural resources in the Monorail Green Line project area. We are aware that the Duwamish Tribe may have information gathered from elders regarding the project area and/or the Tribe may currently use areas for traditional cultural activities near the proposed project. We encourage the Duwamish Tribe's cultural representative to contact us if the Tribe has information that might be useful in the overview, or if the Tribe has comments or concerns regarding the project area. We also understand that traditional cultural use areas are private, but would welcome the opportunity to work with the Tribe regarding incorporation of this type of information in a secure and respectful manner.

We anticipate that Anchor Environmental and Ms. Tracey McKenzie and Parametrix Inc. and Dr. Don Weitkamp will be assisting us with the ESA consultation. An important part of that process will be consultation with tribes to gather information on the salmon and other fisheries resources in the area of the proposed project, especially in the area of the proposed bridge near the existing Ballard Bridge. We encourage the Duwamish Tribe's environmental and fisheries representative to contact us with any comments or concerns regarding the project area.

Please contact Helene Kornblatt at the Seattle Monorail Project (phone: 206-382-1220; email: helene@elevated.org) or Leonard Forsman at LAAS (phone: 1-888-631-6131; email:

lforsman.laas@attglobal.net) or Tracey McKenzie (phone: 206 287-9130; email: tmckenzie@anchorenv.com) at your earliest convenience if you would like to discuss these matters further. You may also send comments directly to the United States Coast Guard to Austin Pratt, 13th Coast Guard District, 915 Second Avenue, Room 3510, Seattle WA 98174-1067. Otherwise, we will contact the Tribe's cultural, environmental and fisheries representatives within the next few weeks.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ross Macfarlane', with a long horizontal flourish extending to the right.

Ross Macfarlane,
Director of Legal and Environmental Affairs

cc: Allyson Brooks, State Historic Preservation Officer
Helene Kornblatt, Seattle Monorail Project
Leonard Forsman, LAAS
Austin Pratt, United States Coast Guard
Tracey McKenzie, Anchor Environmental

SEATTLE MONORAIL PROJECT

direct dial: 206.587-1743
e.mail: helene@elevated.org

April 7, 2003

Ms. Allyson Brooks
Washington State Historic Preservation Officer
1063 S. Capitol Way
Olympia, WA 98504-8343

RE: Identification of Monorail Green Line Area of Potential Effect (APE) for
Cultural Resources in compliance with Section 106 of the National
Historic Preservation Act.

Dear Ms. Brooks:

The Seattle Monorail Project (SMP), acting as the lead agency for the Seattle Monorail Green Line Environmental Impact Statement (EIS) (Project), has prepared the enclosed video and maps showing the proposed Area of Potential Effect (APE) for archaeological sites and buildings and structures. The Monorail Green Line will extend 14 miles from Ballard to West Seattle. The Project study area has been divided into six segments including, Ballard, Interbay, Seattle Center, Downtown, SODO, and West Seattle. The attached maps show the Ballard, Interbay, SODO, and West Seattle segments on individual maps, while the Downtown and Seattle Center segments are combined on one map. The SMP has prepared the enclosed video to provide OAHF staff with a thorough understanding of the buildings and structures located adjacent to the route and surrounding the proposed stations in each segment. The Project guideways will primarily be placed within the public right of way, with the goal to avoid the demolition of historic buildings or structures when ever possible. The primary long-term impacts to historic resources within the APE will consist of indirect impacts caused by the construction of this modern structure in close proximity to historic resources.

Archaeological APE

The SMP proposes that the Project APE for archaeological resources would consist of areas of potential ground disturbance including locations where guideway columns, stations, and substations will be constructed. The archaeological APE will also include the Pioneer Square areaways or "underground Seattle," which consists of underground tunnels and open areas where remnants of Seattle's earliest (pre-1889 fire) construction are evident. SMP proposes to include the areaways within the APE due to potential impacts, such as vibrations, that may be caused by above ground construction

near the areaways. The proposed areas of construction are green on the segment maps. A map of the areaways is attached.

Buildings and Structures APE

The SMP proposes that the Project APE for buildings and structures consist of resources adjacent to (within 100 feet) the guideways and stations in the Ballard, Interbay, SODO, and West Seattle segments. As illustrated on the video, these areas consist of mixed residential and commercial use areas that have in-fill development and numerous alterations to resources 50 years of age.

Because of the density of unaltered historical resources within the Downtown and Seattle Center segments, the APE would be expanded around stations in these segments to include resources within 200 feet of the stations. Similar to the other segments, the APE along guideways in Downtown and Seattle Center would include areas adjacent to the guideway. The Downtown segment also bisects the east side of the Pioneer Square Historic District and is within two blocks of the Pike Place Market Historic District. To address impacts to these areas, the APE would extend 200 feet on either side (east and west) of the guideway at the intersections of 2nd Avenue and Columbia St., Cherry St., James St., Jefferson St., Yesler St., Washington St., Main St., and Jackson St. Only the buildings and structures adjacent to the road in the above-listed areas would be included in the APE. Some of the resources in the specified areas along Cherry St. and all of the resources along Columbia St. are outside the Pioneer Historic District, but are included in the APE due to their age and proximity to the district. In the vicinity of Pike Place Market Historic District, the APE will extend from 2nd Ave. and Pike St. west along Pike St. and from 2nd Ave. and Pine St., west along Pine St., two blocks to the historic district. The APE would be expanded in this area to include visual impacts to the Pike Place Market Historic District. The APE for buildings and structures is illustrated on the attached maps for each segment.

The video of the Project APE was taken beginning at the north end of the Project in the Ballard segment. The video was tapped from a car recording the buildings and structures on each side of the street on which the monorail will pass. The video footage includes views down the side streets that pass through the proposed monorail route, as well as the areas surrounding each of the station locations.

Ms. Allyson Brooks
April 7, 2003
Page 3

If you have any questions regarding the enclosed materials please contact me at the telephone number below. When you have had a chance to review the material I would appreciate your providing me with a written concurrence regarding the APE.

Sincerely,

A handwritten signature in black ink, appearing to read 'Helene Kornblatt', with a stylized, cursive script.

Helene Kornblatt,
Environmental Manager

HK:kam
Enclosures
cc: Kimberly Demuth
Lynn Larson
John Perlic

APPENDIX 3

HISTORIC FEATURES WITHIN THE SEATTLE MONORAIL PROJECT GREEN LINE FROM SANBORN FIRE INSURANCE MAPS (1884-1944)

Appendix 3. Segment 1: Ballard Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1917-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
1.1- West Side of 15 th Avenue 1.1(s) – West Side of 15 th with single beam guideway (PA)			West side of 15 th Avenue NW, west side of Ballard Bridge		
		1.1, 1.1(s)	West side of 15 th Avenue NW between NW 50 th Street and NW. 49 th Street	Store	Sanborn Map Company (1936:Sheet 569)
		1.1, 1.1 (s)	West side of 15 th Avenue NW between NW 49 th Street and Leary Way	Gas Station	Sanborn Map Company (1936:Sheet 569)
		1.1, 1.1 (s)	West side of 15 th Avenue NW between Leary Way and Ballard Way	Gas Station	Sanborn Map Company (1936:Sheet 569)
		1.1, 1.1 (s)	West side of 15 th Avenue NW between Ballard Way and NW 46 th Street	Dwelling	Sanborn Map Company (1917:Sheet 570)
		1.1, 1.1 (s)	West side of 15 th Avenue NW between Ballard Way and W 46 th Street	Dwelling	Sanborn Map Company (1936:Sheet 570)
		1.1, 1.1 (s)	West side of 15 th Avenue NW between NW 46 th Street and Shilshole Avenue	Dwellings	Sanborn Map Company (1917:Sheet 570)
		1.1, 1.1 (s)	West side of 15 th Avenue NW between NW 46 th Street and Shilshole Avenue	Oil Tanks	Sanborn Map Company (1936:Sheet 570)
		1.1, 1.1 (s)	West side of 15 th Avenue NW between Shilshole Avenue to end of Ballard Segment	Motor Shingle Co., Shingle Mill	Sanborn Map Company (1917:Sheet 570)
		1.1, 1.1 (s)	West side of 15 th Avenue NW between Shilshole Avenue to end of Ballard Segment	Lyle Branch Flower Co., Fat Extraction Plant; filled ground; boat storage	Sanborn Map Company (1936:Sheet 570)
1.2 – Center of 15 th	1.1 - Crown Hill 1 (West, 85 th) 1.1 - Crown Hill 1A (West, 85 th) (PA)		Center of 15 th Avenue NW Southwest of NW 85 th Street and 15 th Avenue NW intersection	Dwelling	Sanborn Map Company (1917:Sheet 501)

Appendix 3. Segment 1: Ballard Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1917-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
	1.1 - Crown Hill 1 (West 85 th) 1.1 - Crown Hill 1A (West, 85 th), (PA)		Southwest of NW 85 th Street and 15 th Avenue NW intersection	Garage/Gas Station, Stores	Sanborn Map Company (1936:Sheet 501)
	1.2 - Crown Hill 2 (Center)		North of NW 83 rd street in center of street	Center of 15 th Street	Sanborn Map Company (1917:Sheet 501) Sanborn Map Company (1936:Sheet 501)
	1.1 - NW 65 th 1 (West) 1.1 - NW 65 th 1A (West) 1.1(s) – NW 65 th 1B, (PA)		Southwest of NW 65 th Street and 15 th Avenue NW intersection	Dwelling	Sanborn Map Company (1917:Sheet 545)
	1.1 - NW 65 th 1 (West) 1.1 - NW 65 th 1A (West) 1.1(s) – NW 65 th 1B, (PA)		Southwest of NW 65 th Street and 15 th Avenue NW intersection	Gas Station	Sanborn Map Company (1936:Sheet 545)
	1.2 - NW 65 th 2 (Center)		South of NW 67 th Street and 15 th Avenue NW in center of street	Center of 15 th Street	Sanborn Map Company (1917:Sheet 528) Sanborn Map Company (1936:Sheet 528)
	1.1 - NW Market 1 (Southwest)		Southwest of NW Market Street and 15 th Avenue NW intersection	Store	Sanborn Map Company (1917:Sheet 567)
	1.2 - NW Market 2 (Center)		South of 15 th Avenue NW and NW Market Street with structures on both east and west sides of Market Street	Gas, oil, grease storage, apartments	Sanborn Map Company (1936:Sheet 567)
	1.1 - NW Market 3 (Northwest) 1.1(s) – NW Market 3A (Northwest), (PA)		Northwest of NW Market Street and 15 th Avenue NW intersection	Seattle Lighting Co./ Office, Store, and Storage	Sanborn Map Company (1917:Sheet 567)
	1.1 - NW Market 3 (Northwest) 1.1(s) – NW Market 3A (Northwest), (PA)		Northwest of NW Market Street and 15 th Avenue NW intersection	Gas Station	Sanborn Map Company (1936:Sheet 567)

Appendix 3. Segment 2: Interbay/Magnolia Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1905-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
2.1- West side of 15 th /Center of Elliott (PA)		2.1	Crosses over bridge on the east side of 15 th Avenue West from the end of the Ballard Segment to W Emerson Street	Port of Seattle Commission, Salmon Bay terminal, machine shop, rail yard	Sanborn Map Company (1930:Sheet 1612)
				Aircraft Plywood Corporation, Veneer Factory	Sanborn Map Company (1944:Sheet 1612)
2.1(s) –West side of 15 th /Center of Elliott with single beam		2.1	Crosses over bridge on the east side of 15 th Avenue West from the end of the Ballard Segment to W Emerson Street	United States Plywood Corporation	Sanborn Map Company (1930:Sheet 1613)
2.2 – Center of 15 th /West Side of Elliott				Port of Seattle Commission, Salmon Bay terminal, machine shop, rail yard	Sanborn Map Company (1930:Sheet 1612)
					Sanborn Map Company (1944:Sheet 1612)
Operations Center			Between 15 th Avenue W, W Wheeler Street, and W Armory Way	Dwellings, mattress factory, and oil storage	Sanborn Map Company (1930:Sheet 1642)
Operations Center			Between 15 th Avenue W, W Wheeler Street, and W Armory Way	Apartments, flats, dwellings, mattress factory, and oil storage	Sanborn Map Company (1944:Sheet 1642)
	2.1 - Dravus 1 (16 th)		Northwest of intersection of W Dravus Street and 16 th Avenue W	Automobile Parking	Sanborn Map Company (1944:Sheet 1624)
	2.1 – Dravus 1A (16 th)				
	2.1 – Dravus 1B (Barrett), (PA)		Mid block between 16 th Avenue W and W Barrett Street	Dwellings	Sanborn Map Company (1917:Sheet 402)
	2.2 - Dravus 2 (15 th)		Northwest of W Dravus Street and 15 th Avenue W intersection	Drugstore	Sanborn Map Company (1930:Sheet 1624)
	2.2 - Dravus 2 (15 th)		Northwest of W Dravus Street and 15 th Avenue W intersection	Drugstore	Sanborn Map Company (1944:Sheet 1624)

Appendix 3. Segment 2: Interbay/Magnolia Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1905-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
	2.1 - Howe 1 (West)		Southwest of Howe Street and 15 th Avenue W	Factory for Wood Posts/Office	Sanborn Map Company (1944:Sheet 1644)
	2.1 – Howe 1A (Blaine)		West of 15 th Avenue W between W Howe and W Blaine Streets	Apartments	Sanborn Map Company (1944:Sheet 1643)
	2.2 – Howe 2 (Center)		East of 15 th Avenue W between W Howe and Newton Streets	Storage facility, steep bank	Sanborn Map Company (1917:Sheet 406)
	2.2 -Prospect 3 (West)		Southwest of 15 th Avenue and West Prospect Street	Service/Fuel Station and Tire Shop	Sanborn Map Company (1948:Sheet 430)
	2.1 - Elliott and Mercer 1 (Center)		Center of Elliott Avenue between Mercer Street and Republican	Center of Elliott Avenue	Sanborn Map Company (1905:Sheet 273) Sanborn Map Company (1917:Sheet 432)
	2.1 – Elliott and Mercer 1A (Center), (PA)		East side of Elliott Avenue W between W Mercer and W Republican Streets	Viaduct on pilings, used lumber shed	Sanborn Map Company (1948:Sheet 432) Sanborn Map Company (1917:Sheet 432)
	2.2 - Elliott and Mercer 2 (West)		West side of Elliott Avenue across from triangle parcel bound by W Mercer Street, Sixth Avenue W, and Elliott Avenue W	Lumber Supply and Warehouse. Co. Inc.; Lumber Shed, Wood Posts/Office	Sanborn Map Company (1948:Sheet 432)

Appendix 3. Segment 3: Queen Anne/ Seattle Center/ Belltown Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1905-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
3.1- Seattle Center/ Republican (PA)			South side of Harrison Street, Republican Street path, Center of Fifth Avenue		
		3.1	East of Republican Street to intersection of Thomas Street and Broad Street	Dwellings	Sanborn Map Company (1905:Sheet 255)
		3.1	East of Republican Street to intersection of Thomas Street and Broad Street	Flats, dwellings, apartments, bake house with ovens, car lot, storage	Sanborn Map Company (1917:Sheet 480)
		3.1	East of Broad Street between Thomas Street and John Street	Dwellings	Sanborn Map Company (1905:Sheet 255)
		3.1	East of Broad Street between Thomas Street and John Street	Flats and dwellings	Sanborn Map Company (1917:Sheet 481)
		3.1	East of Broad Street between John Street and Denny Way	Dwellings and Shops	Sanborn Map Company (1905:Sheet 255)
		3.1	East of Broad Street between John Street and Denny Way	Shops, laundry mat, flats	Sanborn Map Company (1917:Sheet 481)
3.2- Mercer	3.1, 3.2 - Seattle Center/ Queen Anne 1 (North)		North side of Harrison Street, Center of Mercer, West side of Fifth Avenue		
3.3- Thomas			South of Harrison Street, Southwest of Key Arena, south side of Thomas Street, west side of Fifth Avenue		
		3.2	Southwest of the intersection of Harrison Street and 1st Avenue N	Stores and drugstore	Sanborn Map Company (1917:Sheet 479)
		3.2	Northeast of 1st Avenue and Thomas Street intersection	Dwellings	Sanborn Map Company (1905:Sheet 253)
		3.2	Northeast of 1st Avenue and Thomas Street intersection	Dwellings and flats, auto sheds	Sanborn Map Company (1917:Sheet 479)
			Northwest of Key Arena near NW Rooms	Warren Avenue Public School	Sanborn Map Company (1905:Sheet 276)

Appendix 3. Segment 3: Queen Anne/ Seattle Center/ Belltown Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1905-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
	3.1, 3.2 - Seattle Center/ Queen Anne 1 (North)		Northwest of Key Arena near NW Rooms	Warren Avenue Public School	Sanborn Map Company (1917:Sheet 438)
	3.1, 3.2 - Seattle Center/ Queen Anne 1A (North), (PA)				
	3.3, 3.5 - Seattle Center/ Queen Anne 2 (South)		Southwest of Key Arena	Store and Flat	Sanborn Map Company (1917:Sheet 479)
	3.1, 3.3 - Seattle Center/ Fifth and Broad 1 (Southeast)		East Side of Fifth Avenue between Broad Street and Denny Way	Flats and City Dye Works Company	Sanborn Map Company (1905:Sheet 255)
	3.1, 3.2, 3.3 – Fifth and Broad 1A (Southwest), (PA)		West side and over Fifth Avenue N, north side of John Street		
	3.2 – Seattle Center/Fifth and Broad 2 (Harrison)				
	3.5 – Denny 3				
	3.1, 3.2, 3.3, 3.5 - Belltown 1 (Center-West)		West of Fifth Avenue, south of Bell Street	Stores	Sanborn Map Company (1944:Sheet 214)
	3.1, 3.2, 3.3, 3.5 - Belltown 1A (Center-West) (PA)		West of Fifth Avenue, south of Bell Street	Stores	Sanborn Map Company (1944:Sheet 214)
	3.1, 3.3, 3.5 - Belltown 2 (Center-East)		East of Fifth Avenue, southeast of Bell Street	Flats	Sanborn Map Company (1905:Sheet 214)
	3.2 - Belltown 3 (West)		West side of Fifth Avenue, south of Bell Street	Stores	Sanborn Map Company (1944:Sheet 214)

Appendix 3. Segment 4: Downtown/Pioneer Square Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1884-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
4.1- West Side of Second (PA)			West side of Second		
			4.1 West corner of the intersection of Fifth Avenue and Stewart Street	Dwellings	Sanborn Map Company (1893:Sheet 57a)
			4.1 West corner of the intersection of Fifth Avenue and Stewart Street	Stores	Sanborn Map Company (1944:Sheet 209)
			4.1 East corner of the intersection of Second Avenue and Stewart Street	Hotel Gowman, stores	Sanborn Map Company (1944:Sheet 136)
			4.1 Crosses block between S Jackson Street and S King Street	Post office	Sanborn Map Company (1944:Sheet 37)
			4.2 East side of second, crossover at Wells Fargo		
			4.2 East corner of the intersection of Second Avenue and Stewart Street	Hotel Gowman, stores	Sanborn Map Company (1944:Sheet 136)
			4.3 Center of Second		
			4.3 East corner of the intersection of Second Avenue and Stewart Street	Dwellings	Sanborn Map Company (1893:Sheet 51b) Sanborn Map Company (1905:Sheet 136)
			4.3 East corner of the intersection of Second Avenue and Stewart Street	Hotel Gowman, stores, restaurant	Sanborn Map Company (1944:Sheet 136)
4.2- East side of Second with Crossover	4.1.1 - Fifth and Stewart 1 (Northwest)		Northwest corner of Fifth Avenue and Stewart Street intersection	Dwellings	Sanborn Map Company (1893:Sheet 57b)
			Northwest corner of Fifth Avenue and Stewart Street intersection	Stores	Sanborn Map Company (1944:Sheet 209)
			West of Fifth, between Stewart Street and Virginia Street	Center of Fifth Avenue	Sanborn Map Company (1893:Sheet 57b)
4.3- Center of Second	4.1.2, 4.3 - Fifth and Stewart 2 (Virginia)				

Appendix 3. Segment 4: Downtown/Pioneer Square Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1884-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
	4.1.2, 4.3 - Fifth and Stewart 2 (Virginia)		West of Fifth, between Stewart Street and Virginia Street	Center of Fifth Avenue	Sanborn Map Company (1944:Sheet 209)
	4.1.2 - Fifth and Stewart 2A (Virginia Center), (PA)		West of Fifth, between Stewart Street and Virginia Street	Center of Fifth Avenue	Sanborn Map Company (1944:Sheet 209)
	4.2, 4.3, 4.4 - Fifth and Stewart 3 (Lenora)		West side of Fifth Avenue between Virginia Street and Lenora	Dwelling	Sanborn Map Company (1893:Sheet 57b)
	4.2, 4.3, 4.4 - Fifth and Stewart 3 (Lenora)		West side of Fifth Avenue between Virginia Street and Lenora	Sheridan Apartments, Office, Drugstore	Sanborn Map Company (1944:Sheet 210)
	4.1 - Pike 1 (West) A, 4.1 - Pike 1 (West) B (PA)		West side of Avenue between Pike Street and Pine Street	Dwellings	Sanborn Map Company (1884:Sheet 8)
	4.1 - Pike 1 (West) A, 4.1 - Pike 1 (West) B (PA)		West side of Second Avenue between Pike Street and Pine Street	Dwellings	Sanborn Map Company (1893:Sheet 51b)
	4.1 - Pike 1 (West) A, 4.1 - Pike 1 (West) B (PA)		West side of Second Avenue between Pike Street and Pine Street	Stores	Sanborn Map Company (1905:Sheet 135)
	4.1 - Pike 1 (West) A, 4.1 - Pike 1 (West) B (PA)		West side of Second Avenue between Pike Street and Pine Street	Prottas and Levitt Brothers Furniture, Stores	Sanborn Map Company (1944:Sheet 135)
	4.2 - Pike 2 (East)		East side of Second Avenue south of Pike Street	Dwellings	Sanborn Map Company (1884:Sheet 8)
	4.2 - Pike 2 (East)		East side of Second Avenue south of Pike Street	Stores and Dwellings	Sanborn Map Company (1893:Sheet 2a)
	4.2 - Pike 2 (East))		East side of Second Avenue south of Pike Street	Offices	Sanborn Map Company (1905:Sheet 135)
	4.2 - Pike 2 (East)		East side of Second Avenue south of Pike Street	The MacDougall and Southwick Company Department Store	Sanborn Map Company (1944:Sheet 136)
	4.3 - Pike 3 (Center)		Center of Second Avenue between Pike and Pine Street	Center of Second Avenue	Sanborn Map Company (1884:Sheet 8)

Appendix 3. Segment 4: Downtown/Pioneer Square Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1884-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
	4.3 - Pike 3 (Center)		Center of Second Avenue between Pike and Pine Street	Center of Second Avenue	Sanborn Map Company (1905:Sheet 135)
	4.3 - Pike 3 (Center)		Center of Second Avenue between Pike and Pine Street	Center of Second Avenue	Sanborn Map Company (1944:Sheet 135)
	4.1 - Madison 1 (West), (PA)		West side of Second Avenue at Federal Reserve (Madison Street/Spring Street)	Dwellings, Methodist and Protestant Church	Sanborn Map Company (1884:Sheet 6)
	4.1 - Madison 1 (West), (PA)		West side of Second Avenue at Federal Reserve (Madison Street/Spring Street)	Frederick and Nelson Furniture and Carpets	Sanborn Map Company (1905:Sheet 139)
	4.1 - Madison 1 (West), (PA)		West side of Second Avenue at Federal Reserve (Madison Street/Spring Street)	Federal Reserve Bank Seattle Branch	Sanborn Map Company (1944:Sheet 139)
	4.2 - Madison 2 (East), 4.4 - Madison 2A (East Center)		East side of Second	Dwellings	Sanborn Map Company (1884:Sheet 5)
	4.2 - Madison 2 (East), 4.4 - Madison 2A (East Center))		East side of Second	Stores	Sanborn Map Company (1893:Sheet 2a)
	4.2 - Madison 2 (East), 4.4 - Madison 2A (East Center)		East side of Second	Stores	Sanborn Map Company (1905:Sheet 135)
	4.2 - Madison 2 (East), 4.4 - Madison 2A (East Center)		East side of Second	Stores	Sanborn Map Company (1944:Sheet 140)
	4.3 - Madison 3 (Center)		Center of Second Avenue between Madison Street and Spring Street	Center of Second Avenue	Sanborn Map Company (1884:Sheet 6)
	4.3 - Madison 3 (Center)		Center of Second Avenue between Madison Street and Spring Street	Center of Second Avenue	Sanborn Map Company (1905:Sheet 139)
	4.3 - Madison 3 (Center)		Center of Second Avenue between Madison Street and Spring Street	Center of Second Avenue	Sanborn Map Company (1944:Sheet 135)

Appendix 3. Segment 4: Downtown/Pioneer Square Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1884-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
	4.1, 4.2, 4.4 - Yesler 1 (West), (PA)		West side of Second Avenue north of Yesler Way at Sinking Ship Garage	Stores	Sanborn Map Company (1905:Sheet 141)
	4.1, 4.2, 4.4 - Yesler 1 (West), (PA)		West side of Second Avenue north of Yesler Way at Sinking Ship Garage	Stores	Sanborn Map Company (1944:Sheet 141)
	4.3 - Yesler 2 (Center)		Center of Second Avenue north of Yesler Way at Sinking Ship Garage	Center of Second Avenue	Sanborn Map Company (1905:Sheet 141)
	4.3 - Yesler 2 (Center)		Center of Second Avenue north of Yesler Way at Sinking Ship Garage	Center of Second Avenue	Sanborn Map Company (1944:Sheet 141)

Appendix 3. Segment 5: SODO/ Chinatown International District/ Pioneer Square Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
5.1-East side of Third/Utah		5.1	East side of Third Avenue S to North side of Lander Street, to Utah Avenue (options) to Horton Street		
		5.1	Crosses block from S King Street to Royal Brougham Way	American Railway Express, rail yard, yard office, freight shed , Swift Company Provisions warehouse	Sanborn Map Company (1944:Sheets 37, 38)
		5.1	East of Third Avenue from Royal Brougham Way and Holgate Street	Grocery Arden Farms Company, dairy productions warehouse, ice cream factory, used lumber yard	Sanborn Map Company (1944:Sheets 57, 95)
		5.1	North of Lander Street between Third Avenue and Occidental Avenue	Used pipe and plumbing supplies storage	Sanborn Map Company (1944:Sheet 97)
		5.1	North of Lander Street between First Avenue and Utah Avenue	Auto service	Sanborn Map Company (1944:Sheet 54)
	5.2- West side of Third/Utah 5.2(s) – West side of Third/Utah with single beam guideway, (PA)	5.1	West of the intersection between 1st Avenue and S Horton Street	Tractor machinery storage, pattern shop	Sanborn Map Company (1944:Sheet 56)
		5.2	West side of Third Avenue S to Diagonal Approach to Lander Street to Utah, Horton Street		
			North of Lander Street between Third Avenue and Utah Avenue	Used pipe storage, plumbing supplies warehouse	Sanborn Map Company (1944:Sheet 97, 54)
			At Weller overpass	American Railway Express, Rail Yards	Sanborn Map Company (1944:Sheet 37)
			Same as Weller/King Street, but event-sized with pedestrian overpasses	G.N. Rail Yards	Sanborn Map Company (1944:Sheet 37)
5.2- West side of Third/Utah 5.2(s) – West side of Third/Utah with single beam guideway, (PA)	5.1 - Weller/King Street 1 (Standard)		East of ballpark between Royal Brougham Way and Atlantic Street	Warehouse	Sanborn Map Company (1944:Sheet 38)
	5.2, 5.2(s) - Weller/King Street 2 (Event), (PA)				
	5.1, 5.2(s) - Safeco Field 1, (PA)				

Appendix 3. Segment 5: SODO/ Chinatown International District/ Pioneer Square Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
	5.1 - Lander 1 (Northeast)		Northeast corner of First Avenue and Lander Street	Lumber Warehouse	Sanborn Map Company (1944:Sheet 54)
	5.1 - Lander 2 (Southwest)		Southwest Corner of First Avenue and Lander Street	Stores	Sanborn Map Company (1944:Sheet 55)
	5.2, 5.2(s) - Lander 3 (Diagonal), (PA)		Between Occidental Avenue and First Avenue north of Lander Street	Plumbing Supplies	Sanborn Map Company (1944:Sheet 54)
	5.1 – Lander 4 (Utah)		West side of Utah Avenue, south of S Lander Street		

Appendix 3. Segment 6: West Seattle Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1917-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
6.1- West Seattle Bridge 6.1(s) – West Seattle Bridge single beam guideway, (PA) 6.2- New Bridge			On West Seattle Bridge to northwest of Delridge Way to North side of Yancy Street, Center of Avalon Way , Northwest side of Fauntleroy Way, north side of Alaska Street, west side of 42nd to center of California Avenue		
			New Bridge to Steel Plant, south side of Andover to Avalon Way, west side of 35th, center of Alaska Street, east side of 44th, east side of California Avenue		
		6.1	Southwest of intersection of SW Andover Street and 26th Avenue SW	Dwelling	Sanborn Map Company (1944:Sheet 749)
		6.1	North of intersection of Fauntleroy Way SW and SW Alaska Street	Gas station	Sanborn Map Company (1944:Sheet 340)
		6.2	South of SW Yancy Street between 28th Avenue SW and 30th Ave SW	Apartments	Sanborn Map Company (1944:Sheet 746)
		6.2	Southwest of intersection of SW Edmunds Street and California Avenue SW	Dwellings, paints and wallpaper, store	Sanborn Map Company (1944:Sheet 343)
	6.1 - Avalon 1 (Center)		Center of Avalon Way west of 35th, with entries to north	Center of Avalon Way	Sanborn Map Company (1944:Sheet 379)
	6.2, 6.2.1 - Avalon 2A (35th)		East of 35th, at SW Oregon Street	Golf Course	Sanborn Map Company (1944:Sheet 755)
	6.1 - Alaska Junction 1 (42nd/Edmunds), (PA)		West side of 42nd between Alaska Street and Edmunds Street	Dwellings and Office	Sanborn Map Company (1944:Sheet 340)
	6.2 - Alaska Junction 2 (44th/California)		East of 44th between Alaska Street and Edmunds Street	Dwellings	Sanborn Map Company (1917:Sheet 325)
	6.2 - Alaska Junction 2 (44th/California)		East of 44th between Alaska Street and Edmunds Street	Dwellings	Sanborn Map Company (1944:Sheet 338)

Appendix 3. Segment 6: West Seattle Historic Features Within Seattle Monorail Project Green Line from Sanborn Fire Insurance Maps (1917-1944).

Alternative	Station	Alignment	Location	Historic Feature	Source
	6.1 - Morgan Junction 1 (West)		Northwest side of intersection of California Avenue and Fauntleroy Way	Dwellings	Sanborn Map Company (1917:Sheet 329)
	6.1, 6.1.6 - Morgan Junction 1A (West), (PA)				
	6.1 - Morgan Junction 1 (West)		Northwest side of intersection of California Avenue and Fauntleroy Way	Stores	Sanborn Map Company (1944:Sheet 350)
	6.1, 6.1.6 - Morgan Junction 1A (West), (PA)				
	6.2 - Morgan Junction 2 (Center)		Center of California Aveune, south of intersection	Center of California Aveune	Sanborn Map Company (1917:Sheet 332)
	6.2 - Morgan Junction 2 (Center)		Center of California Aveune, south of intersection	Center of California Aveune	Sanborn Map Company (1944:Sheet 352)

APPENDIX 4

**WASHINGTON STATE OFFICE OF ARCHAEOLOGY AND HISTORIC
PRESERVATION
CULTURAL RESOURCES SURVEY COVER SHEET**

Cultural Resources Survey Cover Sheet

Author: Dennis E. Lewarch, Gretchen Kaehler, Leonard A. Forsman, and Lynn L. Larson

Title: Part 1 Seattle Monorail Project Green Line, King County, Washington Archaeological Resources and Traditional Cultural Places Assessment

Date: June 20, 2003

County: King Sections: Township 24N, Range: 3E; Sections 13, 14, 23, and 26. Township 24N Range 4E, Sections 5, 8, 7, and 18. Township 25N, Range 3E; Sections 1, 2, 12, 13, 14, 23, 24 and 25: Township: 25N Range: 4E, Sections 30 and 31. Quads: USGS Seattle North, Washington 7.5' x 15' Metric Quadrangle, 1983; USGS Seattle South, Washington 7.5' x 15' Metric Quadrangle, 1983;

Total Pages: 75

Acres: 1

Site No. :
45KI685

(For Author's review)

This report:

- ☒ Describes the objectives & methods.
- ☒ Summarize the results of the survey.
- ☒ Reports where the survey records and data are stored.
- ☒ Has a Research Design that:
 - Details survey objectives
 - Details specific methods
 - Details expected results
 - Details area surveyed
 - Details how results will be feedback in the planning process

OAHP Use Only

NADB Document No: _____ OAHP Log No:

My review results in the opinion this survey report ____does ____does not conform with the Secretary of the Interior's Standards for Identification.

Signed:

Date:

PART 2
Historical Resources (Section 106) Technical Report

by

Kimberly Demuth
Marcia Montgomery
Brent Hicks
Megan Herkelrath
Lisa Meoli

Submitted to:
Parametrix, Incorporated
5808 Lake Washington Blvd NE, Suite 200
Kirkland, Washington 98033

Prepared for:
Seattle Monorail Project
1904 3rd Avenue, Suite 105
Seattle, Washington 98101

ENTRIX, Inc.
2701 1st Avenue, Suite 500
Seattle, WA 98121

MARCH 10, 2004

This Side of the Page Intentionally Left Blank

Contents

INTRODUCTION	123
PROJECT DESCRIPTION	123
CULTURAL RESOURCE REGULATIONS	123
<i>Federal Laws and Regulations</i>	124
<i>Washington State</i>	125
<i>City of Seattle</i>	126
METHODOLOGY	127
DETERMINATION OF THE AREA OF POTENTIAL EFFECT	127
IDENTIFICATION OF HISTORICAL RESOURCES WITHIN THE AREA OF POTENTIAL EFFECT	134
AFFECTED ENVIRONMENT	143
HISTORICAL CONTEXT	143
<i>Seattle Historical Development Overview</i>	143
<i>Ballard Segment</i>	150
<i>Interbay/Magnolia Segment</i>	152
<i>Queen Anne/Seattle Center/Belltown and Downtown/Pioneer Square Segments</i>	154
<i>SODO/Chinatown International District/Pioneer Square Segment</i>	158
<i>West Seattle Segment</i>	160
HISTORICAL RESOURCES INVENTORY	163
<i>Ballard Segment</i>	163
<i>Interbay/Magnolia Segment</i>	163
<i>Queen Anne/Seattle Center/Belltown Segment</i>	164
<i>Downtown/Pioneer Square Segment</i>	164
<i>SODO/Chinatown International District/Pioneer Square Segment</i>	165
<i>West Seattle Segment</i>	166
IMPACTS ANALYSIS	183
LONG-TERM OPERATION IMPACTS	192
<i>Ballard Segment</i>	193
Alternative 1.1 – West Side of 15th	193
Alternative 1.2 – Center of 15th	193
Preferred Alternative	193
<i>Interbay/Magnolia Segment</i>	194
Alternative 2.1 – West Side of 15th /Center of Elliott	194
Alternative 2.2 – Center of 15th /West Side of Elliott	194
Operations Center C-1 Interbay	194
Preferred Alternative	194
<i>Queen Anne/Seattle Center/Belltown Segment</i>	195
Alternative 3.1 – Seattle Center/Republican	195
Alternative 3.2 – Mercer	196
Alternative 3.3 – Thomas	196
Alternative 3.5 – Second/Denny	196
Preferred Alternative	197
<i>Downtown/Pioneer Square Segment</i>	197
Alternative 4.1 – West Side of Second	197
Alternative 4.2 – East Side of Second with Crossover	199
Alternative 4.3 – Center of Second	200
Alternative 4.4 – East of Center Option	201
Preferred Alternative	201
<i>SODO/Chinatown International District/Pioneer Square Segment</i>	202
Alternative 5.1 – East Side of Third/Utah	202
Alternative 5.2 – West Side of Third/Utah	202
Operations Center – C-2 – SODO	202
Preferred Alternative	202
<i>West Seattle Segment</i>	202

Alternative 6.1 – West Seattle I	202
Alternative 6.2 – West Seattle II	203
Alternative 6.3 – Delridge North Single Beam	203
Alternative 6.4 – Andover/Yancy	203
Alternative 6.5 -Genesee	203
Preferred Alternative	203
No Action Alternative	204
SHORT TERM/CONSTRUCTION IMPACTS	211
Alternative 1.1 – West Side of 15th	221
Alternative 1.2 – Center of 15th	221
Ballard Preferred Alternative	221
<i>Interbay/Magnolia Segment</i>	221
Alternative 2.1 – West Side of 15th /Center of Elliott	221
Alternative 2.2 – Center of 15th /West Side of Elliott	222
Interbay/Magnolia Preferred Alternative	222
<i>Queen Anne/Seattle Center/Belltown Segment</i>	223
Alternative 3.1 – Seattle Center/Republican	223
Alternative 3.2 – Mercer	223
Alternative 3.3 – Thomas	224
Alternative 3.5 – Second/Denny	224
Queen Anne/Seattle Center/Belltown Preferred Alternative	224
<i>Downtown/Pioneer Square Segment</i>	225
Alternative 4.1 – West Side of Second	225
Alternative 4.2 – East Side of Second with Crossover	226
Alternative 4.3 – Center of Second	227
Alternative 4.4 East of Center Option	227
Downtown/Pioneer Square Preferred Alternative	228
<i>SODO/Chinatown International District/Pioneer Square Segment</i>	228
Alternative 5.1 – East Side of Third/Utah	228
Alternative 5.2 – West Side of Third/Utah	228
SODO Preferred Alternative	228
<i>West Seattle Segment</i>	229
Alternative 6.1 – West Seattle I	229
Alternative 6.2 – West Seattle II	229
Alternative 6.3(s) – Delridge North Subsegment	229
Alternative 6.4 –Andover/Yancy Subsegment	230
Alternative 6.5 -- Genesee Subsegment	230
West Seattle Preferred Alternative	230
No Action Alternative	230
MITIGATION MEASURES	231
OPERATION IMPACT MITIGATION MEASURES	231
<i>Demolition</i>	231
<i>Traffic Congestion/Access/Isolation</i>	232
<i>Noise and Vibration</i>	232
<i>Visual</i>	232
<i>Change of Use</i>	232
<i>Ballard Segment</i>	247
<i>Interbay/Magnolia Segment</i>	247
Operations Center – Interbay Alternative	247
<i>Queen Anne/Seattle Center/Belltown Segment</i>	247
<i>Downtown/Pioneer Square Segment</i>	248
<i>SODO/Chinatown International District/Pioneer Square Segment</i>	248
Operations Center – SODO Alternative	248
<i>West Seattle Segment</i>	248
No-Action Alternative	249
SHORT TERM/CONSTRUCTION IMPACTS MITIGATION MEASURES	249
<i>Ballard Segment</i>	249
<i>Interbay/Magnolia Segment</i>	249
<i>Queen Anne/Seattle Center/Belltown Segment</i>	249
<i>Downtown/Pioneer Square Segment</i>	249

<i>SODO/Chinatown International District/Pioneer Square Segment</i>	254
<i>West Seattle Segment</i>	254
<i>Operations Center Alternatives</i>	254
CUMULATIVE IMPACTS.....	254
SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS.....	255
BIBLIOGRAPHY	256

Tables

Table NN-1 Inventory of Historic Properties	167
Table NN-2 Preliminary Evaluation of Effect.....	185
Table NN-3 Historic Resources and Construction Vibration Impact from Pile Driving.....	216
Table NN-4 Adverse Effects by Alternatives	237

Figures

Figure NN-1	Segment 1: Ballard Area of Potential Effect	129
Figure NN-2	Segment 2: Interbay/Magnolia Area of Potential Effect	130
Figure NN-3	Segment 3 and 4: Queen Anne/Seattle Center/Belltown Downtown/Pioneer Square Area of Potential Effect	131
Figure NN-4	Segment 5: SODO/Chinatown International District/Pioneer Square Area of Potential Effect	132
Figure NN-5	Segment 6: West Seattle Area of Potential Effect	133
Figure NN-6	Segment 1: Ballard Historic Resources Listed in or Eligible for Historic Registers	136
Figure NN-7	Segment 2: Interbay Historic Resources Listed in or Eligible for Historic Registers	137
Figure NN-8	Segment 3 and 4: Queen Anne/Seattle Center/Belltown/Pioneer Square Historic Resources Listed in or Eligible for Historic Registers	138
Figure NN-9	Segment 5: SODO/Chinatown International District/Pioneer Square Historic Resources Listed in or Eligible for Historic Registers	139
Figure NN-10	Segment 6: West Seattle Historic Resources Listed in or Eligible for Historic Registers	140
Figure NN-11	Green Line Guideway parallel to Ballard Bridge.....	205
Figure NN-12	Green Line Guideway passing over or demolishing a residence located on 16 th Avenue NW	206
Figure NN-13	Green Line Guideway passing over or demolishing a residence located on 16 th Avenue W	206

Figure NN-14	Green Line Guideway passing over Fisherman’s Terminal Area	207
Figure NN-15	The Tsubota Steel and Pipe building would be demolished under the Home1A (Blaine) Station Alternative	208
Figure NN-16	Green Line Guideway would demolish the Seattle Center Monorail Terminal and Track. Adverse Effect: Demolition/Alteration of Property	209
Figure NN-17	Green Line Guideway passing over Dalmasso Apartments located on West Harrison Street. Adverse Effect: Demolition/Alteration of Property	210
Figure NN-18	Visual simulation showing the Green Line within the Pioneer Square Historic District, Along Second Avenue with a station in front of the Smith Tower	211
Figure NN-19	Pike 1B (West) Station located mid-block between Pike and Pine Streets	212
Figure NN-20	Green Line Guideway passing near King Street Station located on South Jackson Street	212
Figure NN-21	Green Line Station Madison 1 (West) would demolish the Federal Reserve Building.....	213
Figure NN-22	Green Line Guideway Footing to be placed along exterior wall of Butler Garage Areaway D-127c and Broderick Building Areaway D-127b	213
Figure NN-23	Green Line Guideway following SW Avalon and turning onto SW Spokane Street near the Nucor Steel Mill.....	214

Appendices

Appendix 1	Agency Correspondence	258
Appendix 2	Historical Resource Inventory Forms for Significant Buildings and Structures (To be included in the Washington OAHF database)	296
Appendix 3	Historic Resource Inventory Table and Maps Showing Historic Resources Inventoried (Category A, B and C Resources).....	299
Appendix 4	Visual Simulations	351
Appendix 5	Pioneer Square Historic District Areaways Mitigation Study.....	370
Appendix 6	Green Line EIS Areaways Study	404
Appendix 7	Seattle Monorail Project Draft Memorandum of Agreement - Attachment A: Historic Resources to be Documented and Attachment B: Curriculum Plan Prepared by Heather MacIntosh, Historic Seattle Preservation and Development Authority	468

INTRODUCTION

PROJECT DESCRIPTION

ENTRIX conducted a historical resources study for the Green Line EIS. This study was conducted in compliance with National Environmental Policy Act (NEPA) and Washington State Environmental Policy Act (SEPA) and Section 106 of the National Historic Preservation Act. This technical report accompanies an EIS defining the affected environment and identifying effects and mitigation measures for historic resources. The EIS has been structured to simultaneously meet the requirements of the NEPA, the National Historic Preservation Act, SEPA, and City of Seattle Historic Preservation requirements.

To address compliance under NEPA and Section 106, architectural historians assessed National Register of Historic Places (NRHP) eligibility of unaltered and noteworthy resources that are 50 years of age and located within the Green Line's Area of Potential Effect (APE). Architectural historians also evaluated the potential eligibility of resources that may be demolished by the SMP for inclusion in the Washington Heritage Register and as Seattle City Landmarks to address SEPA compliance.

Specific tasks of the study included: coordinating with numerous agencies; attending agency, public and team meetings regarding NRHP and Seattle City Landmarks eligibility of historical resources; conducting field investigations and historical research; conducting an assessment of visual effects to historic resources; and coordinating the separately-produced Section 106 Technical Reports and EIS sections for archaeological and historical resources.

Agency coordination included correspondence with the Washington State Office of Archaeology and Historic Preservation (OAHP) regarding NEPA and Section 106 requirements; obtaining the concurrence of the Washington State Historic Preservation Officer (SHPO) and the Seattle Historic Preservation Officer on the definition of the Green Line APE; and coordinating with the Seattle Department of Neighborhoods Urban Conservation Division regarding compliance with SEPA and pertinent Seattle historic preservation laws. Staff provided OAHP and the City of Seattle with statements of NRHP significance for resources that are 50 years of age and located within the APE. Project staff assessed potential effects to and prepared information on potential mitigation measures for resources listed in or eligible for the NRHP. To meet SEPA and City of Seattle historic preservation requirements, staff provided the Seattle Department of Neighborhoods Urban Conservation Division with background information and a current photograph for all buildings that are proposed for demolition under the Green Line alternatives. Staff also supplied the Urban Conservation Division with an assessment of effects and mitigation measures for Seattle Landmarks.

CULTURAL RESOURCE REGULATIONS

The following is a brief summary of the cultural resource laws and regulations that apply to the Green Line.

Federal Laws and Regulations

NEPA requires consideration of the effects of an undertaking on cultural resources before an undertaking is approved. 36 CFR Part 800 allows for NEPA/Section 106 consideration. As a result, this Section 106 report has been structured to comply with NHPA in addition to NEPA.

Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) requires federal agencies to assess effects of federal undertakings, as defined in 36 CFR 800.16(Y) (including where a federal permit is required, such as for the Green Line) on historic properties. Because the U.S. Coast Guard review for water crossings is a federal undertaking, consultation under the National Historic Preservation Act (NHPA) is applicable to the undertaking. The U.S. Coast Guard has delegated to SMP the responsibility to act as the lead agency for implementation of Section 106 of the NHPA for the Green Line EIS. State of Washington and City of Seattle regulations regarding cultural resources also apply to the Green Line, pursuant to that delegation of authority (See Appendix 1 for Agency Correspondence).

Section 106 of the NHPA requires consideration of the effects of all federal undertakings (or federally regulated undertakings such as the Green Line) on historic properties. The NHPA defines historic properties as “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register of Historic Places...” (36 CFR 800.16). It also includes properties of traditional religious and cultural importance (traditional cultural properties) that are eligible for inclusion in the National Register of Historic Places (NRHP). The NRHP is the federal list of historic, archaeological, and other cultural resources that are significant in American history, prehistory, architecture, archaeology, engineering, and culture and includes districts, sites, buildings, structures, objects, and landscapes. The list includes not just historic properties themselves, but also artifacts, records, and remains that are related to and located in such properties.

The Office of Archaeology and Historic Preservation (OAHP) in Olympia administers Washington State’s NRHP program under the direction of the State Historic Preservation Officer (SHPO). The following NRHP criteria, identified in 36 CFR 60, serve as the basis for evaluating a historic resource's eligibility for listing at the national, state, and local levels. The quality of significance in American history, architecture, archaeology, and culture is possible in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association, and:

- A. are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. are associated with the lives of persons significant in our past; or
- C. embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components make lack individual distinction; or
- D. have yielded, or may be likely to yield, information important in prehistory or history.

Buildings less than 50 years old do not meet the NRHP criteria unless they are of exceptional importance.

Consideration of effects for the undertaking must include the APE. The intent of Executive Order 11593, Protection and Enhancement of the Cultural Environment, has been integrated into Section 110 of the NHPA through the 1980 amendments to the act. Federal agencies must coordinate with the SHPO and obtain the review and comment of the Advisory Council for Historic Preservation (ACHP) before undertaking projects that affect such properties. The regulations encourage applicants to initiate and pursue the steps of the review process and promote the integration of Section 106 reviews with National Environmental Policy Act regulations, thereby clarifying public participation procedures and streamlining steps in the Section 106 review process.

NEPA established a decision making process that provides for the systematic consideration of alternatives and examination of the direct, indirect, and cumulative environmental effects associated with implementation of a proposed action. Under NEPA, federal agencies must take into account effects to historic resources, or those resources that are eligible for the NRHP, before a project is approved. The NEPA process provides an avenue to facilitate compliance with other statutory and regulatory requirements (e.g., NHPA) but compliance with NEPA does not satisfy these other applicable requirements or vice-versa.

The Homeland Security Act of 2002 transferred the U. S. Coast Guard from the U. S. Department of Transportation (DOT) to the U. S. Department of Homeland Security (DHS). Prior to passage of the Homeland Security Act, the Coast Guard's bridge permit program had been a DOT program. As a DOT agency, the Coast Guard was responsible for implementing Section 4(f) of the DOT Act of 1966, which requires DOT agencies to perform a particular type of alternatives analysis for transportation projects that use any land from a public park, recreation area, wildlife and waterfowl refuge, or any historic site. Since the Coast Guard is no longer a DOT agency, a Section 4(f) analysis is not required for Coast Guard bridge permit actions. The Coast Guard will, nevertheless, ensure project environmental impacts on these resources are identified and assessed in the EIS, and appropriately considered before any final agency action on the project is taken.

Washington State

The Washington SEPA (RCW 43.21C), and implementing rules in the Washington Administrative Code (WAC 197-11) also apply to the Green Line. SEPA requires the identification of significant adverse effects to historic, archaeological, and ethnographic resources listed in or eligible for the national, state, or local registers. Measures must be considered to reduce or control effects to identified historic properties affected by a proposed undertaking.

The Office of Archaeology and Historic Preservation (OAHP) in Olympia administers Washington State's cultural resources regulations, as well as its NRHP program and the Washington Heritage Register, a Washington-specific list of properties, similar to the NRHP.

Federal agencies (including agencies reviewing permits for federally regulated undertakings such as the Green Line project) must coordinate with the SHPO and obtain the review and comment

of the Advisory Council for Historic Preservation (ACHP) before beginning undertakings that may affect properties eligible for the NRHP.

City of Seattle

The City of Seattle's SEPA rules establish environmental policies and procedures specific to historic resources (SMC 25.05). In addition, under the City's Landmarks Preservation Ordinance (SMC 25.12), an object, site, or improvement that is more than 25 years old may be designated as a landmark if it has significant character, interest or value as part of the development, heritage or cultural characteristics of the city, state, or nation, and if it falls into one of the following categories:

- A. It is in the location of, or is associated in a significant way with any historic event with a significant effect upon the community, city, state, or nation; or
- B. It is associated in a significant way with the life of a person important in the history of the city, state, or nation; or
- C. It is associated in a significant way with a significant aspect of the cultural, political, or economic heritage of the community, city, state, or nation; or
- D. It embodies the distinctive visible characteristics of an architectural style, period, or of a method of construction; or
- E. It is any outstanding work of a designer or builder; or
- F. Because of prominence of spatial location, contrasts of siting, age, or scale, it is an easily identifiable visual feature of its neighborhood or the city and contributes to the distinctive quality or identity of such neighborhood or the city.

The Seattle Landmarks Preservation Board reviews and acts on nominations, designations and applications or Certificates of Approval (required for any change of use and to alter, demolish, construct, remodel or to make visible change to the exterior appearance) for designated features of City landmarks.

METHODOLOGY

DETERMINATION OF THE AREA OF POTENTIAL EFFECT

The Green Line is a linear system that will, by necessity, cross by many areas where there are numerous cultural resources. Columns to support the Green Line's guideways will be placed primarily within the public right-of-way. The primary long-term effects to historic resources within the Green Line APE are expected to consist of indirect effects caused by the presence of this modern structure in close proximity to historic resources (see Visual Simulations, Appendix 4).

In the Ballard, Interbay/Magnolia, SODO/Chinatown International District/Pioneer Square, and West Seattle segments, the Green Line's APE for buildings and structures over 50 years old includes resources adjacent to (within 100 feet) of the potential locations for guideways and stations. These areas consist of mixed residential and commercial use areas that have in-fill development and numerous alterations to resources that are 50 years of age and older (Figures NN-1, NN-2, NN-3, NN-4, and NN-5).

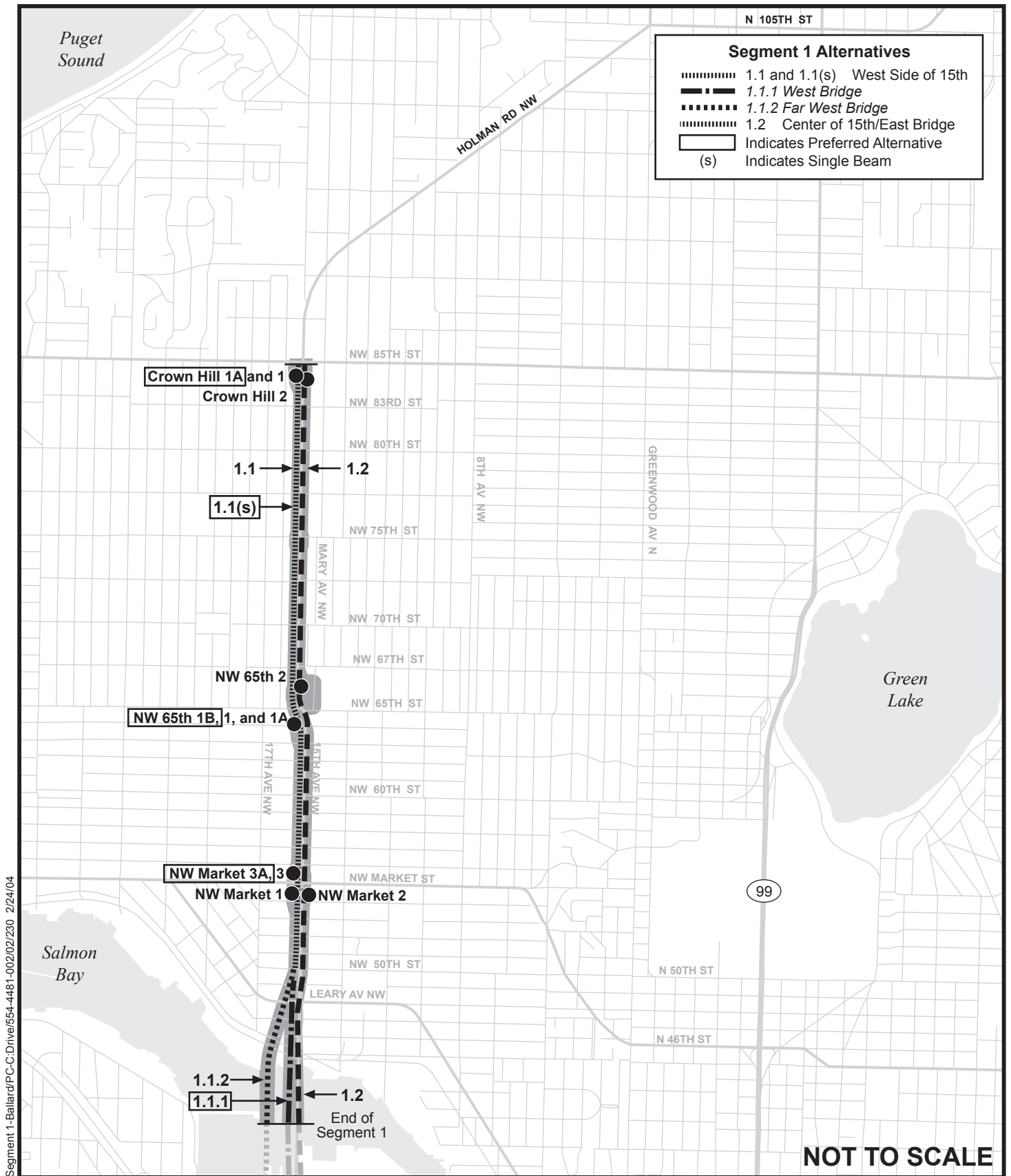
Because of the density of unaltered historical resources within the Downtown/Pioneer Square and Queen Anne/Seattle Center/Belltown segments and based on consultation with the SHPO and the City of Seattle Historic Preservation Officer, the APE was expanded to include resources within 200 feet of the alternative station locations. Similar to the other segments, the APE in the Downtown and Queen Anne/Seattle Center/Belltown segments includes areas adjacent to (within 100 feet) of the guideway.

The Downtown/Pioneer Square Segment passes through the east side of the Pioneer Square Historic District and passes within two blocks of the Pike Place Public Market Historic District. To address effects to these areas, the APE was extended for the purpose of historic resources effect analysis. Though the Pioneer Square Historic District is separated physically into both the Downtown/Pioneer Square and SODO/Chinatown International District/Pioneer Square segments, it was included within the discussion of the Downtown/Pioneer Square Segment for this report.

Pioneer Square. Within the Pioneer Square Historic District, the APE extends 200 feet on either side (east and west) of the guideway at the intersections of Second Avenue and Columbia Street, Cherry Street, James Street, Jefferson Street, Yesler Way S, Washington Street, S Main Street, and S Jackson Street. Only the buildings and structures adjacent to the road in the above-listed areas are included in the APE. Some of the resources in the specified areas along Cherry Street and all of the resources along Columbia Street are outside the Pioneer Square Historic District boundaries, but are included in the APE due to their age and proximity to the District.

Pike Place Market. In the vicinity of the Pike Place Public Market Historic District, the APE extends from Second Avenue and Pike Street west along Pike Street and from Second Avenue and Pine Street, west along Pine Street, two blocks to the boundaries of the historic district. The APE is expanded in this area to include assessment of visual

effects to the historic district. The APE was expanded in this area to include assessment of visual effects to the Pike Place Public Market Historic District.

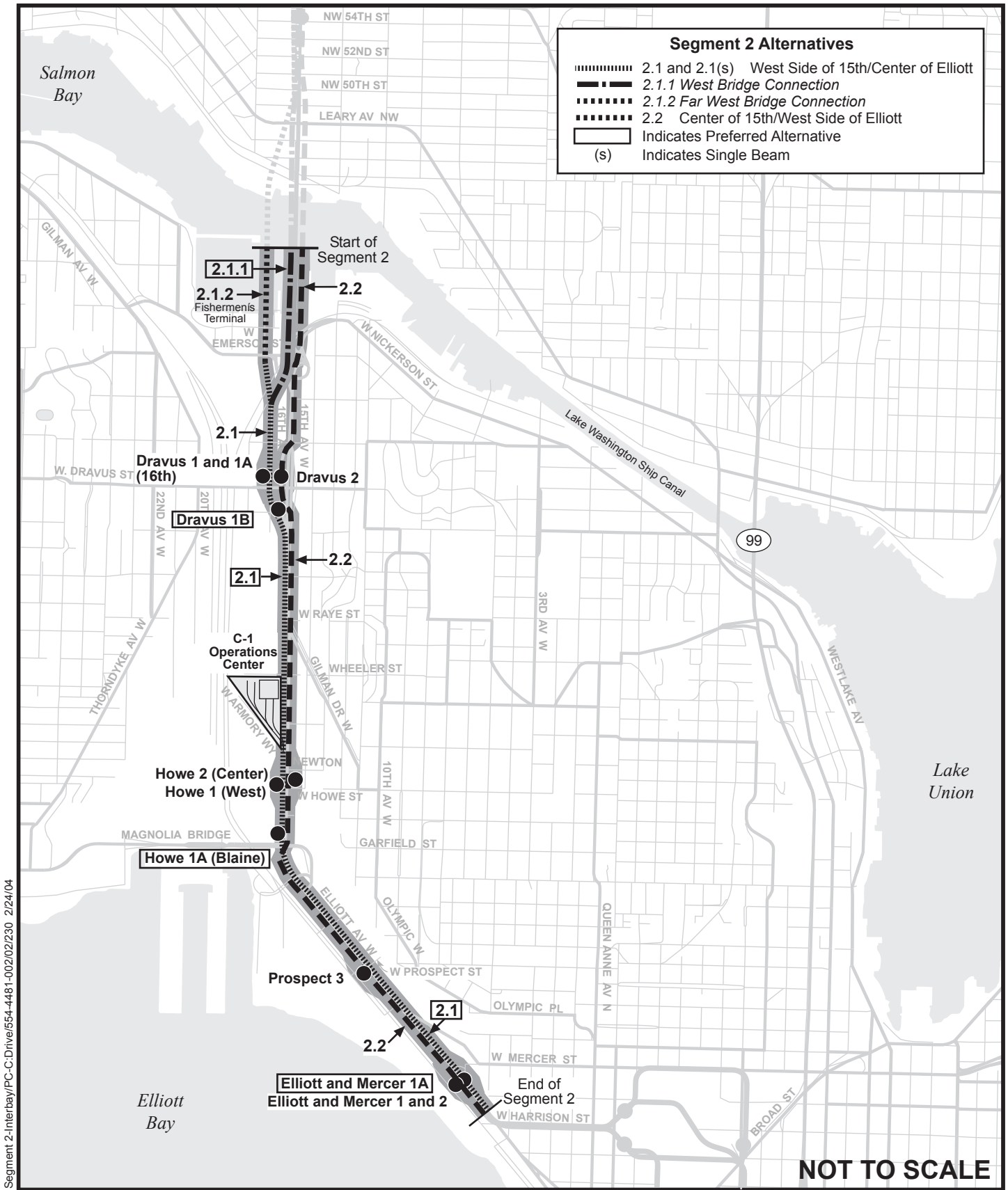


Segment 1-Ballard/PC-C:Drive/554-4481-002/02/230 2/24/04



Area of Potential Effect (APE)
for Buildings and Structures

Figure NN-1
Segment 1: Ballard
Area of Potential Effect



Segment 2-Interbay/PC-C:Drive/654-4481-002/02/230 2/24/04



Area of Potential Effect (APE)
for Buildings and Structures

Figure NN-2
Segment 2: Interbay/Magnolia
Area of Potential Effect

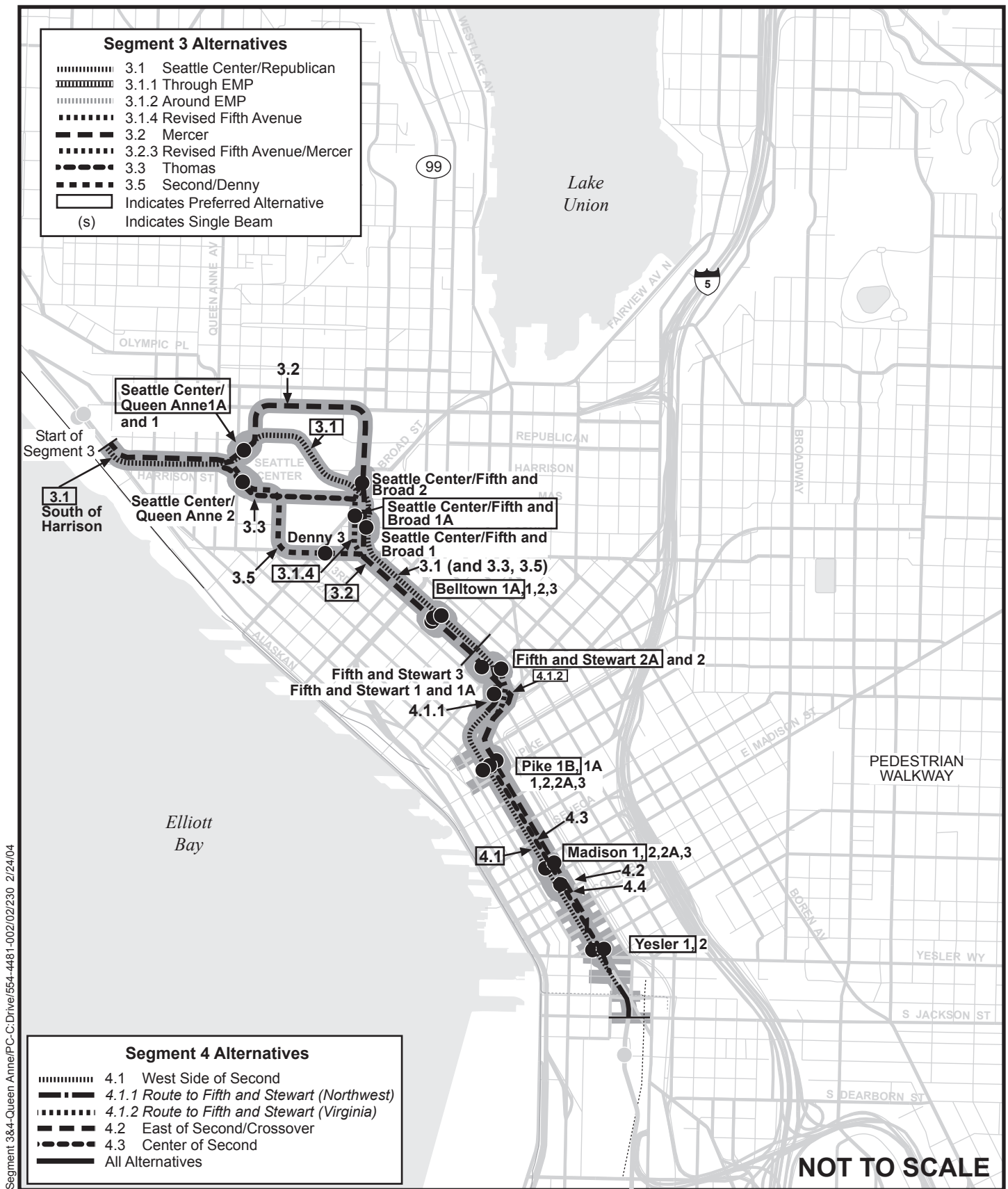
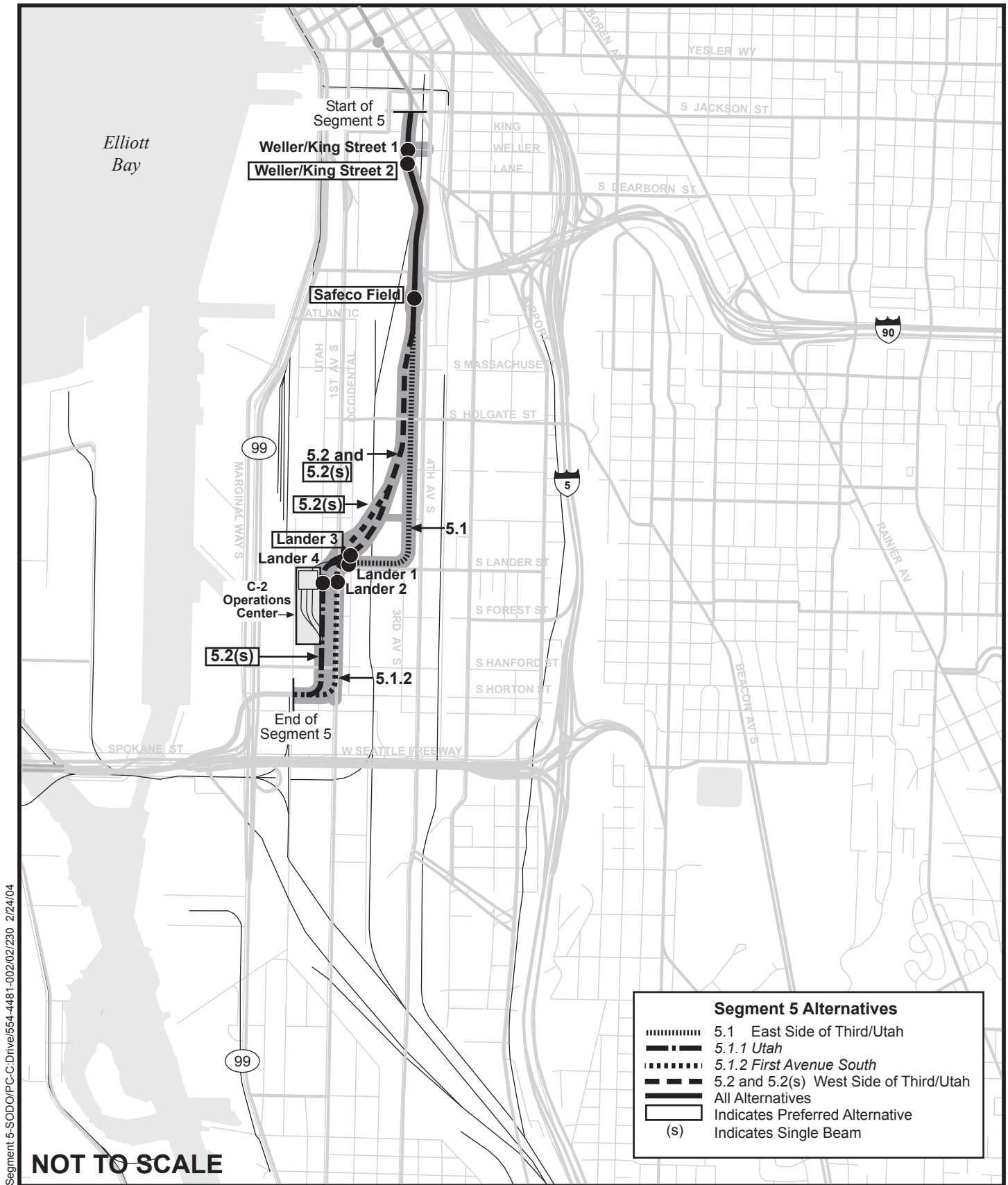
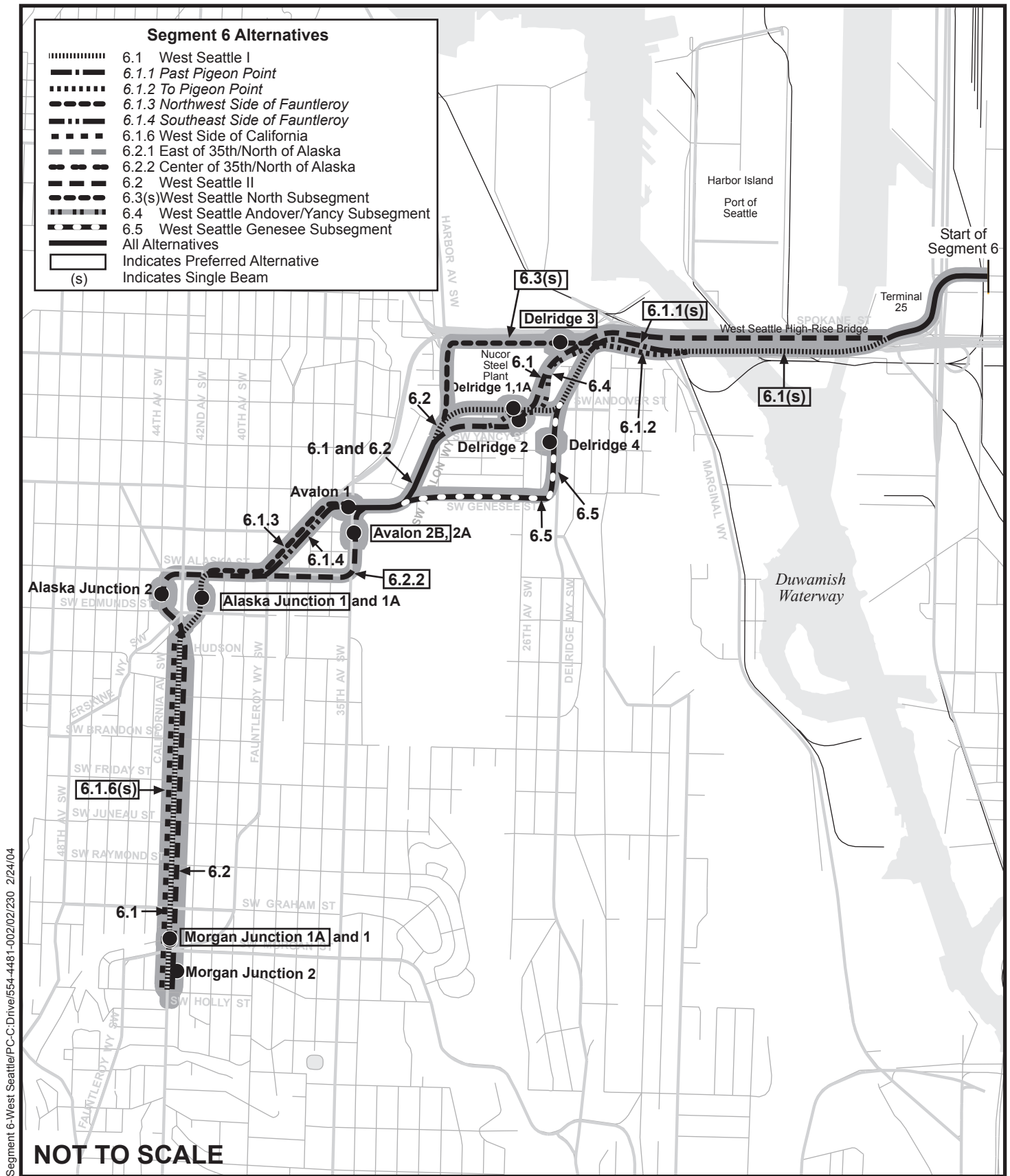


Figure NN-3
Segment 3 and 4: Queen Anne/
Seattle Center/Belltown,
Downtown/Pioneer Square
Area of Potential Effect



Area of Potential Effect (APE)
for Buildings and Structures

Figure NN-4
Segment 5: SODO/Chinatown
International District/Pioneer Square
Area of Potential Effect



Segment 6-West Seattle/PC-C:Drive/554-4481-002/02/230 2/24/04



Area of Potential Effect (APE)
for Buildings and Structures

Figure NN-5
Segment 6: West Seattle
Area of Potential Effect

Green Line Guideway columns will be constructed primarily within the public right-of-way. The primary long-term adverse effects to historic resources within the APE are expected to consist of indirect effects caused by the visual presence of this modern structure in close proximity to historic resources, as well as the effects associated with the construction and operation of the monorail and the demolition of historic.

IDENTIFICATION OF HISTORICAL RESOURCES WITHIN THE AREA OF POTENTIAL EFFECT

Project historians conducted field evaluations to identify significant buildings and structures within the Green Line APE that are 50 years of age (resources) as well as significant buildings and structures over 50 years old that are either listed in or eligible for historic registers (historic resources). In accordance with SEPA, the significance of noteworthy resources over 25 years of age was also reviewed. The historians marked the location of historical resources on field maps showing building footprints. For field purposes, historical resources were recorded under the following categories:

- Category A Significant (listed in the NRHP, WHR, Seattle Landmarks, or previously determined eligible for listing in the NRHP)
- Category B Unaltered resources within the APE that were further researched to determine historical significance.
- Category C Modified resources lacking historical integrity or historical resources from the later period without important historical or architectural associations.

The historians identified Category A historic resources by obtaining relevant previously prepared nomination forms, inventory forms, or SHPO correspondence. For Category B resources, historical resource summary sheets were prepared to include a current photograph of the resource, property address, date of construction, a brief summary of the resource's history, a list of any modifications to the resource, and a statement of its historical significance. Only modifications evident during field survey from public right-of-way, evident from the historical King County Tax Assessors Records, or listed in previously prepared nominations were recorded. Because field investigations determined that Category C resources lacked significance and did not require additional research, Category C summary sheets simply included a photograph of the resources and its address. If a Category C resource had been previously inventoried, the form was attached. For each segment, team members prepared a summary table that listed the significance of historical resources, its property address, date of construction, and if relevant, a list of modifications that have compromised the resource's historical integrity. Resources in each segment and relevant segment summary tables were assigned property numbers sequentially within each segment and listed in corresponding maps (Appendix 3).

SMP submitted the above-listed documentation regarding historical resources and neighborhood historical context statements for each segment to the Washington SHPO and the Seattle Historic Preservation Officer for review. Separate packets of information were provided to the agencies for the Ballard, Interbay, SODO, and West Seattle segments. Information relating to the Queen Anne/Seattle Center/Belltown and Downtown/Pioneer Square Segments was combined into a

single packet. SMP conducted follow-up meetings with the agencies to obtain concurrence regarding determinations of eligibility for the NRHP. Historic resources previously listed in or determined eligible for historic registers are shown by segment on Figures NN-6, NN-7, NN-8, NN-9, and NN-10. The Washington SHPO provided written correspondence regarding further information requested on analyzed properties in letters found in Appendix 1 to this report. SMP also addressed the additional research requests with follow-up research on specific properties and conducted a final meeting with agencies to obtain concurrence on the eligibility of the resources in question. The background research data will be archived in agency files. Inventory forms on B Category resources determined eligible for the NRHP and not previously inventoried will be completed and filed with the OAHF (Appendix 2).

Historical research was focused on obtaining information regarding the historical use, occupation, and design significance of historical resources. Historians conducted research at the Washington State Archives – Puget Sound Regional Branch, Seattle Public Library, Washington Office of Archaeology and Historic Preservation, Seattle Department of Neighborhoods Urban Conservation Division, and Seattle Department of Construction and Land Use. ENTRIX assessed alterations to historical resources, by referencing historical photographs found on King County Assessor's records dating to the 1930s. Historians also obtained information regarding past occupants of properties using Seattle City Directories. Long-term occupants were researched in the Seattle Public Library biographical and business indices and relevant published sources. Historical plans on file at DCLU provided researchers with information regarding the architects and builders associated with the original construction of buildings, as well as alterations that may have occurred to buildings over time.

To facilitate their evaluation, the project historians undertook the following tasks:

Visual Simulations. Project historians worked with the SMP visual resources team to identify specific locations within the APE where visual simulations should be prepared to assist in addressing effects to known historic resources. Initially, ENTRIX identified specific views of known historic resources for potential simulation development. Subsequently, the project team conducted a field overview of portions of the SODO and Downtown/Pioneer Square Segments to refine the specific views to be used for historical resource analysis. The SHPO was also consulted to obtain input regarding the refinement of specific visual simulations. Draft simulations were provided to the agencies for review. A final copy of visual simulations relevant to known historic resources is included as an appendix to this report (Appendix 4).

Video and photographic survey. The research effort also included a videotaped survey of the Green Line APE and photographs of known historic resources and their setting. The photographs were used for the visual simulations described above to assist in addressing potential effects to known historic resources.

Context Statement. A context statement, describing the historical development of the neighborhoods within the Green Line APE is included in this report. It provides additional background information that aided in the assessment of potential Green Line effects and mitigation.

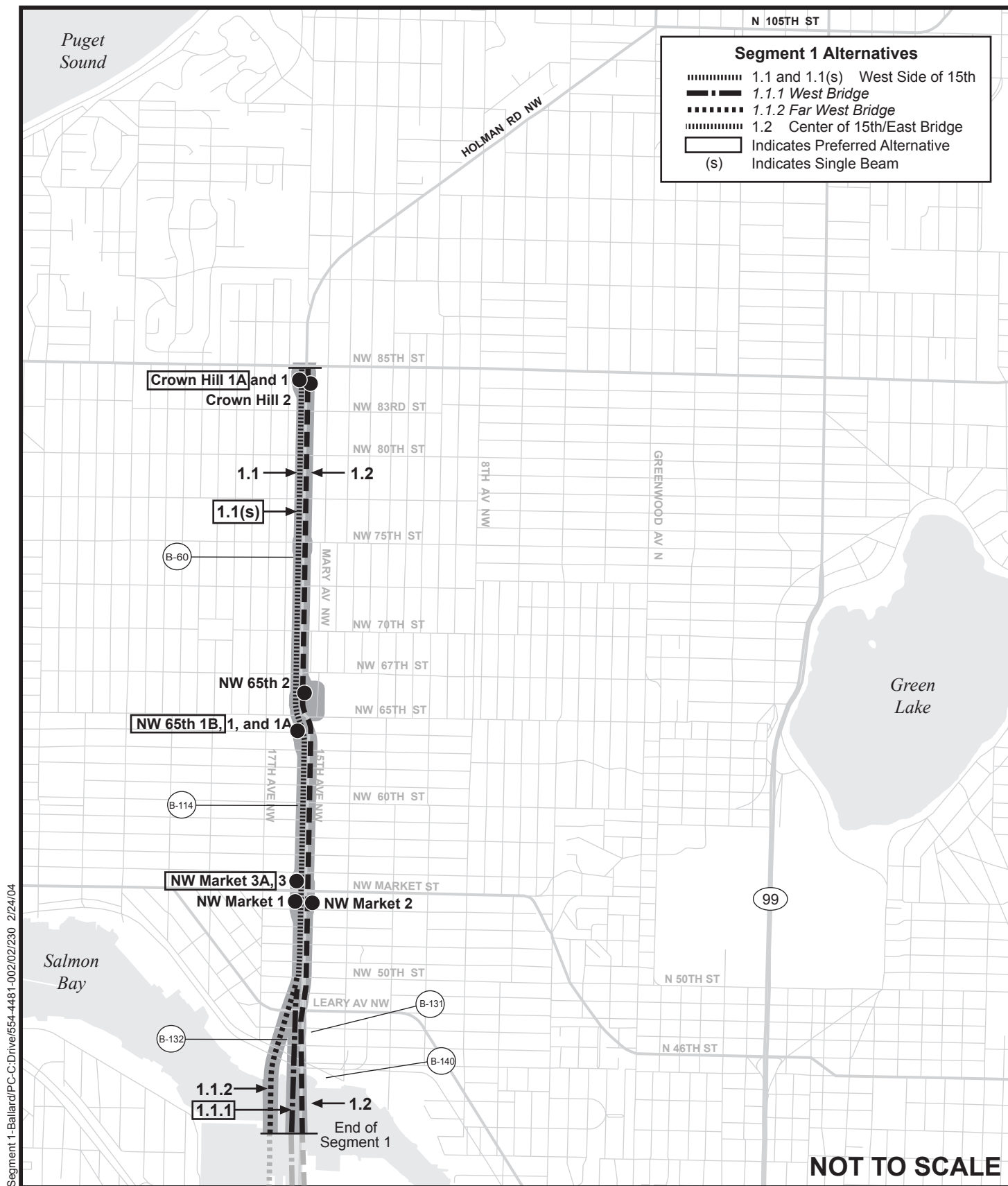
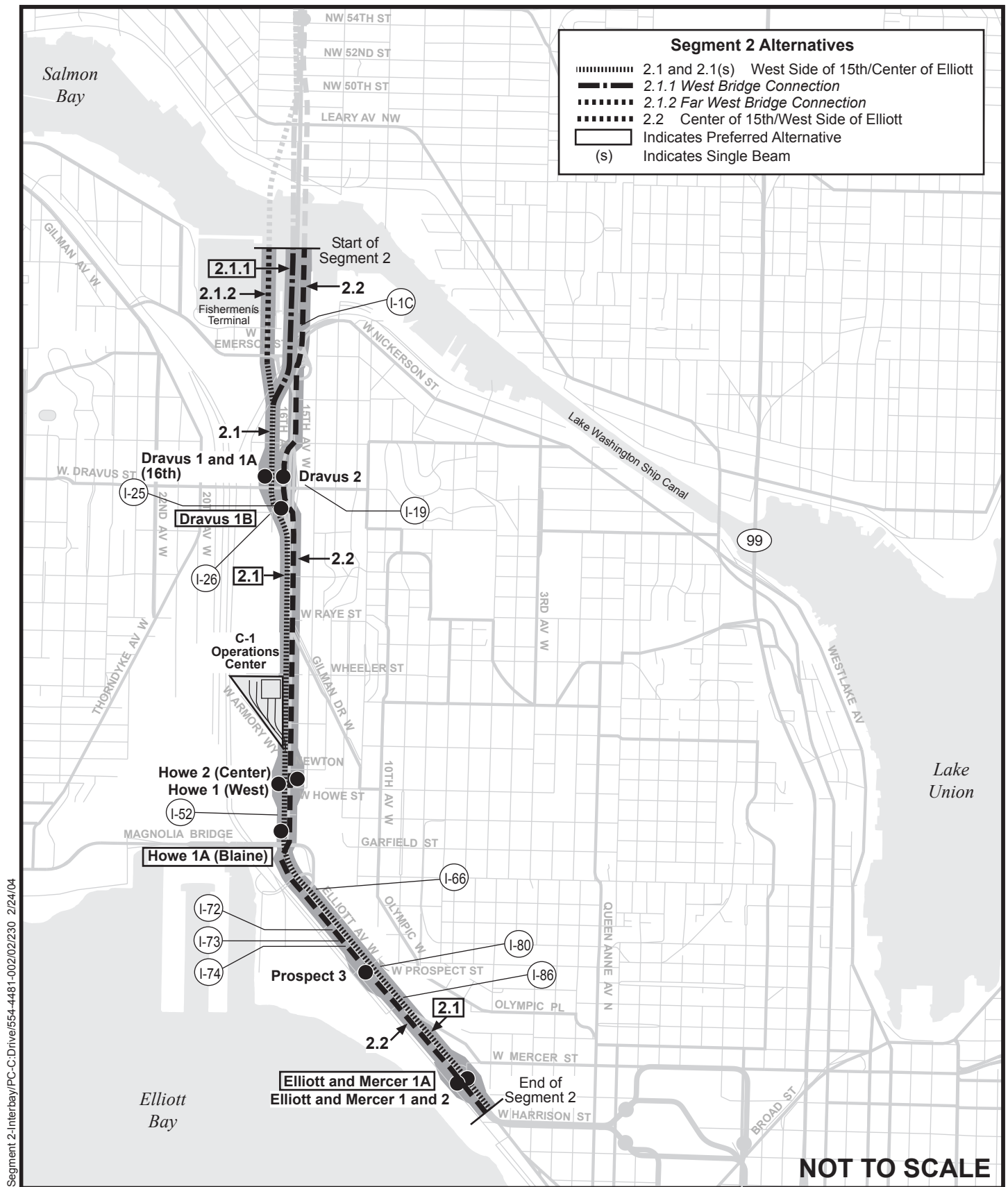


Figure NN-6
Segment 1: Ballard
Historic Resources Listed in or
Eligible for Historic Registers



Segment 2-Interbay/PC-C:Drive/654-4481-002/02/230 2/24/04



Area of Potential Effect (APE)
for Buildings and Structures

Figure NN-7
Segment 2: Interbay
Historic Resources Listed in or
Eligible for Historic Registers

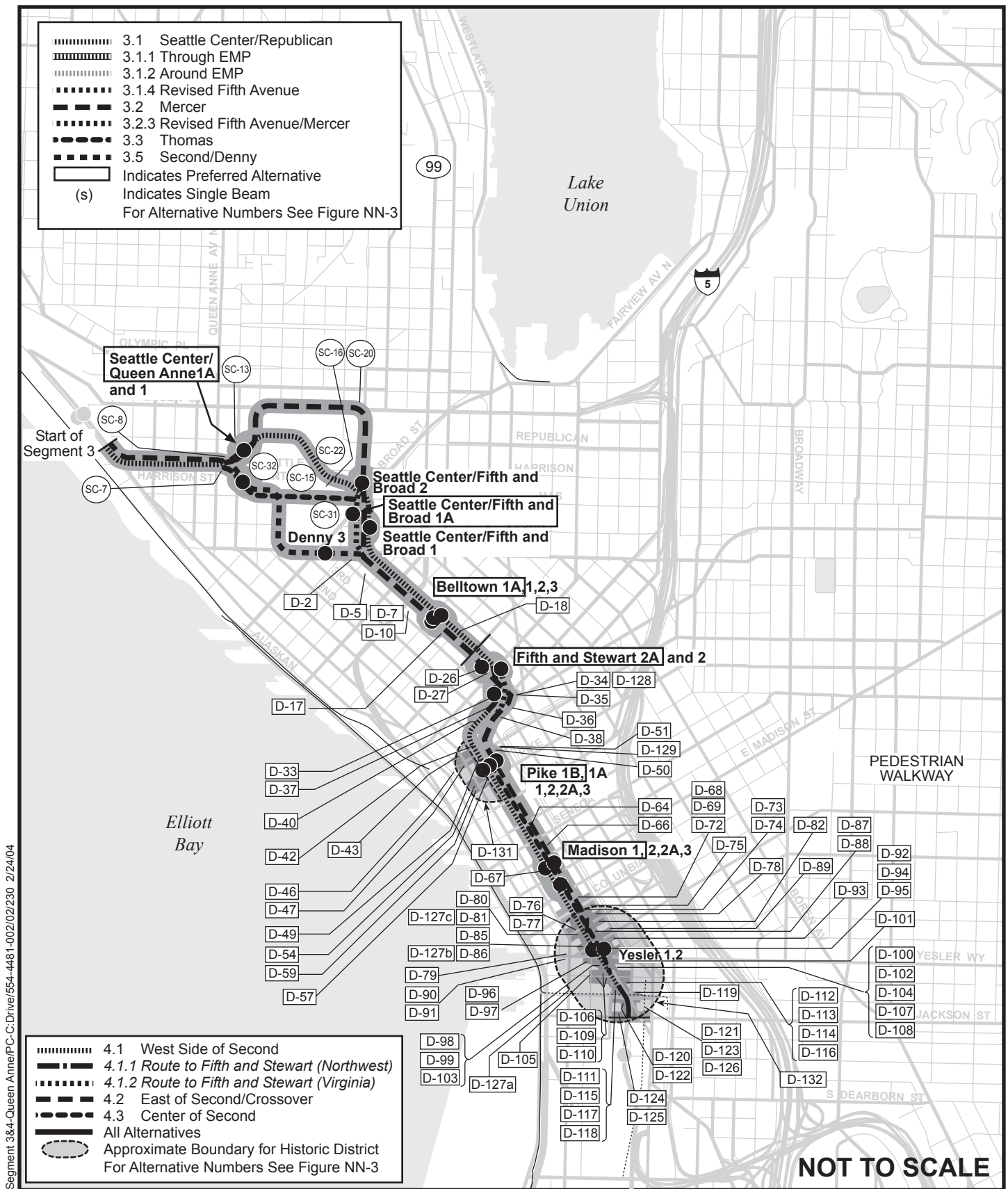
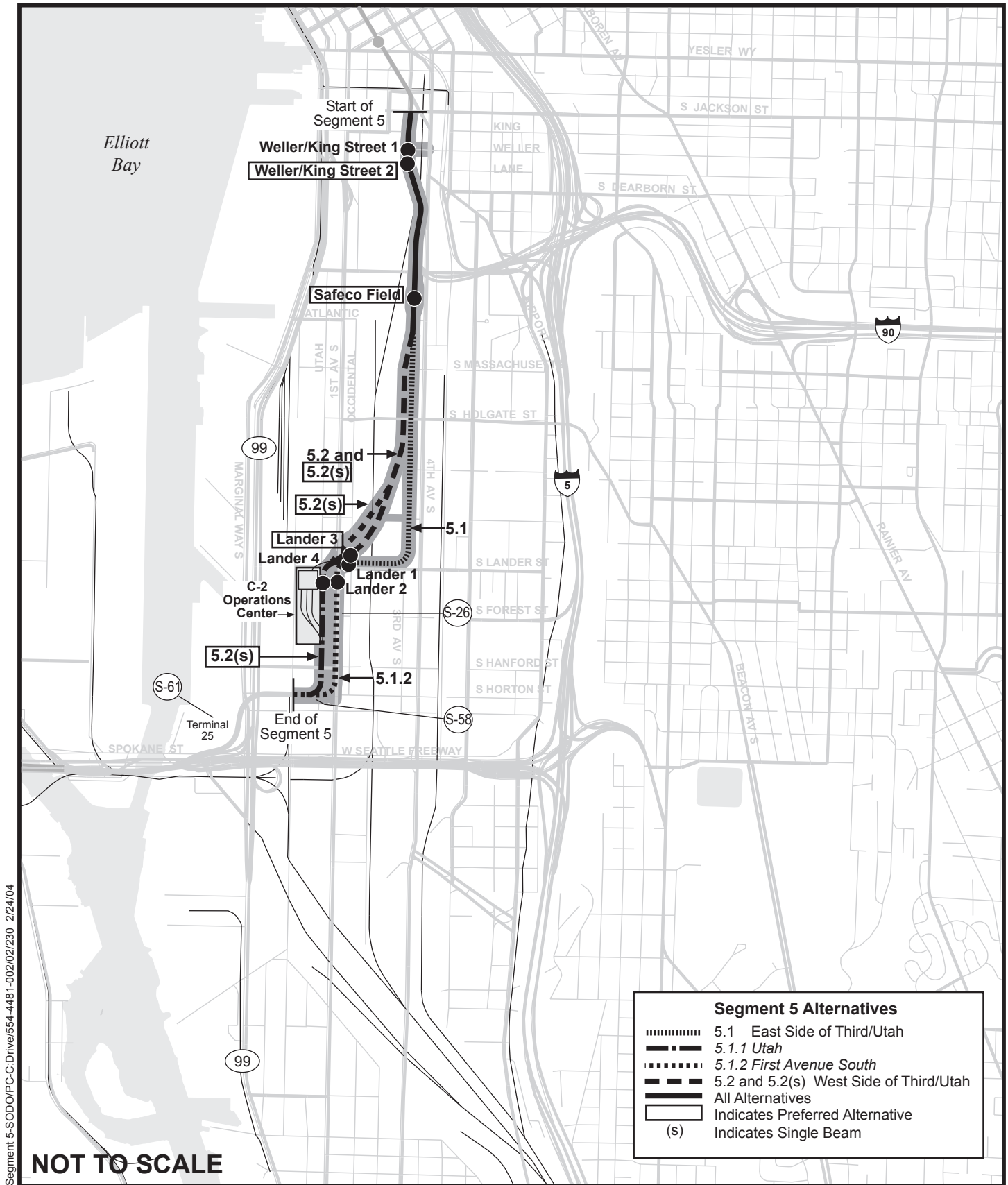


Figure NN-8
Segment 3 and 4: Queen Anne/
Seattle Center/Belltown,
Downtown/Pioneer Square
Historic Resources Listed in or
Eligible for Historic Registers



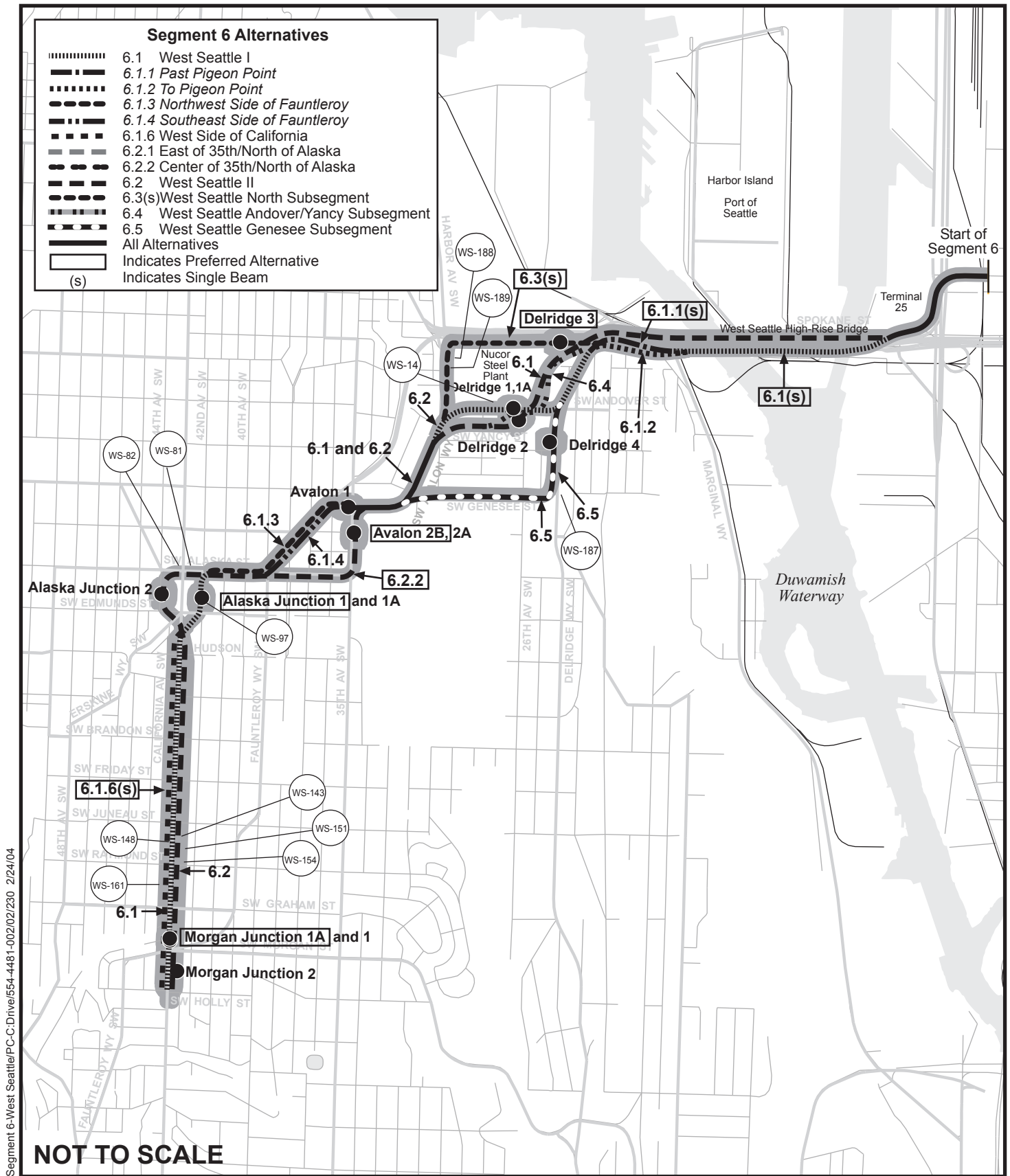
Segment 5-SODO/PC-C:Drive/554-4481-002/02/230 2/24/04



Figure NN-9
Segment 5: SODO/Chinatown
International District/Pioneer Square
Historic Resources Listed in or
Eligible for Historic Registers



Area of Potential Effect (APE)
 for Buildings and Structures



Segment 6-West Seattle/PC-C:\Drive\554-4481-002\02\230 2/24/04



Area of Potential Effect (APE)
for Buildings and Structures

Figure NN-10
Segment 6: West Seattle
Historic Resources Listed in or
Eligible for Historic Registers

Agency coordination included correspondence and work sessions with the OAHP regarding NEPA and Section 106 requirements; obtaining the concurrence of the SHPO and the Seattle Historic Preservation Officer on the definition of the Green Line APE; and coordinating with the City of Seattle regarding compliance with SEPA and pertinent Seattle historic preservation laws. Staff provided OAHP and the City of Seattle, Urban Conservation Division with statements of the NRHP significance for resources that were over 50 years of age and located within the APE. Project staff assessed potential effects to historic resources and prepared potential mitigation measures for resources listed in or determined eligible for historic registers. To meet SEPA and City of Seattle historic preservation requirements, staff provided the City Preservation Officer with background information and a current photograph for buildings that are proposed for demolition under the Green Line alternatives. Staff also supplied the Urban Conservation Division with an assessment of project effects and mitigation measures for Seattle Landmarks.

Numerous agency work sessions were held with the SHPO and the City Historic Preservation Officer and interested parties to determine the eligibility, adverse effects and mitigation measures for all historic resources in the APE of the Green Line. Below is a list of all meeting and agency work session dates, meeting subject, and persons present: There were over thirty public meetings held for the project. For information on public meetings, see the *Green Line Environmental Impact Statement*, Appendix D, Public Involvement.

- May 16, 2003: Discussed the eligibility of historical resources in SODO and West Seattle, as well as written comments provided by Allyson Brooks (OAHP) and Michael Sullivan (City of Seattle) regarding the historic resource information packets submitted by ENTRIX for SODO, West Seattle, and Ballard
- May 21, 2003: Discussed the eligibility of and adverse effects to historical resources in SODO and West Seattle
- May 23, 2003: Discussed the eligibility of and adverse effects to historical resources in Ballard
- May 28, 2003: Discussed the eligibility, adverse effects/mitigation measures for historical resources in Queen Anne/Seattle Center/Belltown and Downtown/Pioneer Square segments.
- June 4, 2003: Discussed the additional research requested by Allyson Brooks (OAHP) on selected resources in all segments and mitigation for all segments
- December 9, 2003: Discussed proposed mitigation measures with SHPO, City of Seattle, Historic Seattle and other interested parties.
- January 14, 2004: Discussed proposed mitigation measures for historic resources with SMP, OAHP, and City of Seattle and Historic Seattle.
- January 21, 2004: Meeting with a representative of the Advisory Council on Historic Preservation, SHPO, City of Seattle, Historic Seattle Preservation and Development Authority and other interested parties to discuss mitigation measures.

Since the publication of the Green Line Draft EIS in response to comments from the public agencies, several alternatives not studied in detail in the Draft EIS and several refined station locations have been added for review in the Final EIS. This resulted in additional field investigations of 45 additional buildings. In the new study areas, project historians conducted field investigations to identify resources that appeared eligible for the NRHP. Recommendations regarding the NRHP eligibility of these resources have been included in the Final EIS.

Since issuing the Draft EIS, project historians also conducted a study of areaways outside the Pioneer Square Historic District. Areaways are the space directly beneath the sidewalk, between the building walls and the street wall. Areaways are the result of turn-of-the-century projects that raised the height of the roadways above the first floor of existing buildings. In 2003, a separate study of areaways in the Pioneer Square Historic District was conducted (Parsons Brinkerhoff and Sheridan Consulting Group 2003). Previously, the SHPO determined that Pioneer Square Historic District areaways are eligible for the NRHP. This study is incorporated in Appendix 5. Since the Draft EIS, project historians evaluated 34 areaways within the APE that are located outside the Pioneer Square Historic District. The study identified two areaways that are eligible for the NRHP. A copy of the *Green Line Areaways Study* is included in Appendix 6.

AFFECTED ENVIRONMENT

HISTORICAL CONTEXT

Seattle Historical Development Overview

Puget Sound's first European explorer, George Vancouver, explored Puget Sound in 1792 and named many of the area's geographic features, often after members of his expedition (e.g., Joseph Whidbey). However, the long-time occupants of Puget Sound, including the Duwamish and Suquamish tribes in the area where Seattle would develop, also had names for the landscape around them. Many of these names still apply today, such as Tacoma (Tahoma) and Sammamish. Seattle was named for the leader of the Duwamish and Suquamish tribes at the time when the first Euro-American settlers arrived in the area in the 1850s (Ficken and LeWarne 1988; Spiedel 1967:43; "Milestones in King County History," www.historylink.org).

The first permanent European settlement on Puget Sound, established in 1833 by the Hudson's Bay Company, was on the Nisqually Delta. In 1841, the Wilkes expedition, the first American exploring expedition to the area, charted Puget Sound and named numerous landmarks, including Elliott Bay (Sayre 1937). In 1846, Britain surrendered its claims south of the 49th parallel, in part because most of the settlers in the Willamette Valley and other parts of the "Oregon Country" were Americans. The Donation Land Claims Act of 1850, offering 320 acres of land for free to any adult U.S. Citizen (640 acres to married couples) who agreed to occupy the claim for five years, spurred a new influx of settlers to the Oregon Territory, which included present-day Washington State. On September 16, 1851, Luther Collins and three other men traveled north from Ft. Steilacoom and made the first Donation Land claims within the future King County in rich Duwamish River bottomland in what would later become Georgetown. Two weeks later, Collins brought his family members and their possessions north by boat around Alki Point and up the Duwamish River. At Alki, they were greeted by David Denny and two friends who also were scouting for land in advance of the arrival of their wives and relatives. The rest of the Denny Party arrived at Alki in mid-November in a scene of tears and despair, the description of which is one of Seattle's great historical legends. Within a few weeks one member of the party opened a store on Alki Point, the first store in King County (Ficken and LeWarne 1988; Sale 1976; Spiedel 1967: 30; Ochsner 1994:xvii; "Milestones in King County History," www.historylink.org).

In February 1852, Arthur Denny, Carson Boren, and William Bell selected claim sites on the eastern portion of Elliott Bay and relocated their families in April from Alki Point. They began clearing land and building houses. David "Doc" Maynard moved north from Olympia in March, and in time claimed and platted a portion of the Elliott Bay shore, and opened the first hospital in the Northwest as well as a fish-packing plant. Henry Yesler passed through looking for a place to locate a steam-powered sawmill, wanting to take advantage of the abundance of timber growing along the shore of Puget Sound. Denny convinced Yesler to build the mill at Seattle and, with the California building boom absorbing all the milled wood available, Seattle was quickly established as the economic capital of Puget Sound. Denny, Maynard, and Yesler proved to be the enterprising founders and promoters of the new city, often competing with each other in developing businesses and in planning the city's future (Ficken and LeWarne 1988; Morgan 1951; Ochsner 1994: xvii; "Milestones in King County History," www.historylink.org).

In December 1852, the Oregon Territorial Legislature approved the creation of King County and named Seattle as the seat of its government. Olympia, as one of the first American communities, and the largest settlement at the time, was selected as the capital when Washington Territory was created in 1853 (Ficken and LeWarne 1988; “Milestones in King County History,” www.historylink.org).

In the summer of 1853, coal was discovered near where Renton would develop along the Black River. Soon after the Duwamish Coal Company was formed and this deposit became the first coal mined and shipped from King County. The history of coal in Puget Sound is tied to the development and expansion of the railroad in the West. Locomotives burned coal, and coal could not be transported without the railroad. These two industries grew together in the region, the health of each enabling the growth of both. Washington coal found a major market in California and was used to fuel locomotives and steamships and to heat homes. In addition to Renton, large coal mines developed at Black Diamond and Franklin, with much of the coal shipped out of Elliott Harbor. The coal companies built railroads from the coal mines to Seattle, extending on trestles out over the broad shallow tidelands of south Elliott Bay to the area of today’s Harbor Island. Together with timber, coal was a major force for economic growth in the Seattle area in the earliest days of the city’s history (Ficken and LeWarne 1988; Spiedel 1967:143-152; “Milestones in King County History,” www.historylink.org).

The jobs supplied by the local timber and coal industries led to rapid expansion of the Seattle city core, and houses and small businesses spread out from the commercial center that grew up around Yesler’s sawmill and the waterfront shipping businesses. Seattle’s first church building was dedicated in 1855, serving a Methodist Episcopal congregation that had first been organized in 1853. Town gatherings occurred in several community centers or meeting halls; initially the cookhouse at the Yesler Mill served this purpose, but Plummer’s Hall (1859-66), Yesler’s Hall (1861-70), and Yesler’s Pavilion (1865-87) also served the growing community. These meeting halls were also where art events were presented until the Squire’s Opera House, Seattle’s first theater opened in 1879 (Ficken and LeWarne 1988; “Milestones in King County History,” www.historylink.org).

The influx of settlers and new industries, as well as new uses of the area’s natural resources, forced many native tribal people out of their traditionally occupied lands. The Treaty of Medicine Creek, one of the most important treaties for Western Washington tribes, was signed at a meeting at Medicine Creek in present-day Kitsap County in 1854. Sixty-two leaders of major Western Washington tribes signed the treaty with Territorial Governor Isaac Stevens. The tribes ceded most of their lands in exchange for \$32,500, designated reservations, and the permanent right of access to traditional hunting and fishing grounds (“Milestones in King County History,” www.historylink.org). The next year the Point Elliott Treaty failed to provide the Duwamish people their own reservation, leading to a souring of relations and a brief uprising, including an attack on the vulnerable town (Crowley 1998:4-5).

In 1860, the first federal census of Washington Territory counted just 302 people in King County. Fear of a reoccurrence of an Indian uprising concentrated the large part of the population near Seattle. The next year, the Territorial University (later, University of Washington) opened in downtown Seattle at present-day 4th Avenue and University Street (“Milestones in King County History,” www.historylink.org).

Seattle businesses and industries quickly began to develop. Seattle's first newspaper, the Seattle Gazette (a weekly newspaper), opened in 1863. When the Western Union telegraph line reached Seattle the next year, the Seattle Gazette published an extra edition, reporting the first dispatches received from the East Coast, including Civil War news, that was just one day old. Transportation in the region also improved. In 1867, the first wagon road was completed over Snoqualmie Pass. The importance of this route was realized as early as 1855, but it was not until 1865 that a route for the road was located and surveyed. Seattle residents raised \$2,500 for the project and a crew of 20 men were hired to construct a road from Rangers Prairie (the future North Bend) to Snoqualmie Pass. While the road was being constructed during 1865, a train of six wagons made the first traverse of Snoqualmie Pass. Seattle had long had access to the Pacific Coast and even Asia as a result of the extensive trade networks established for lumber, but these two events linked the young city to the old part of the country and raised expectations for increased settlement and trade (Ficken and LeWarne 1988; "Milestones in King County History," www.historylink.org).

On December 2, 1869, the Territorial Legislature incorporated the City of Seattle with boundaries of Galer Street to the north, Hanford Street to the south, Elliott Bay to the west, and Lake Washington to the east. The Town of Seattle had been incorporated from 1865 to 1867, but had reverted back to King County until December 1869. The next summer, Northern Pacific Railroad surveyors arrived in Seattle and began surveying a route for the railroad from Yesler's Wharf at the foot of Mill Street (renamed Yesler Way). Expecting that Seattle would be selected as the western terminus of the continental railroad, speculators began a buying frenzy of Seattle real estate. Seattle property immediately doubled in price and some real estate increased three to four times over the next several years. But in 1873 the Northern Pacific dashed Seattle's hopes when it announced that Tacoma would be the railroad terminus (Ochsner 1994:xviii). In the meantime, a narrow gauge railroad was built in Seattle running from south Lake Union to the foot of Pike Street. Part of the Newcastle coal mines transportation system, it was the first railroad in Western Washington ("Milestones in King County History," www.historylink.org). By 1875, the Seattle & Walla Walla Railroad was also constructed, formed by Seattle citizens and running from Seattle to the coal mines of Renton. Although the Seattle & Walla Walla Railroad was originally meant to run all the way to eastern Washington, this hope was disbanded after the first leg was constructed (Hart-Crowser, Inc. 1996:H-4).

The real estate boom resulted in the expansion of Seattle's business district, as well as its residential districts. Seattle's first brick building was completed in 1872. Constructed to house a general store and wholesale house, it stood just south of old Pioneer Square on First Avenue in the heart of the early city's business district. The next year, a coal gas plant was built in the (present-day) Pioneer Square area and by December coal gas was used for the first time to light Seattle streets, homes, and businesses. First Hill, Seattle's first exclusively residential neighborhood, was located directly behind the pioneer business district and benefited from its proximity to the gas plant by being an early recipient of gas lighting ("Milestones in King County History," www.historylink.org).

With over 3,000 citizens, Seattle in 1880 was the second largest town in Washington Territory after Walla Walla. However, the next few decades brought a sustained building boom that increased Seattle's population to the largest in the State. Transportation figured largely in the boom times. Despite being overlooked for the Northern Pacific railroad terminus, a year after the tracks were completed into Tacoma in 1883, the bustling economy in Seattle led to establishment

of a spur line to Seattle. However, anti-Seattle interests in Tacoma terminated use of the spur line in 1887. Also in 1884, the Seattle Railway Company started running horse-drawn streetcars along 2nd Avenue from Yesler Way to Pike Street. Two more branches followed the next year extending the lines to the foot of Queen Anne Hill and north to Lake Union. On the waterfront, the introduction of railroad tracks paralleling the shoreline to service the shipping piers developed into Railroad Avenue (what is now the Alaska Way Viaduct). This area was later extended from the shoreline on a timber trestle supporting nine parallel tracks above the tides. In 1889, the first regularly scheduled electric car began to run over one of the trolley lines formerly powered by horses. For a year, this line was the only electric streetcar line on the Pacific Coast (Courtois and Associates 1999; Ficken and LeWarne 1988; Ochsner 1994:xviii; "Milestones in King County History," www.historylink.org).

The first regularly scheduled ferry on Puget Sound, the City of Seattle, made its first run from Seattle to Duwamish Head at West Seattle in 1888. The side-wheeler steamboat carried passengers, wagons, cattle, and buggies, and completed the route across Elliott Bay in about eight minutes. The ferry served the residential development of the West Seattle Land and Improvement Company, the future Admiral District of West Seattle. San Francisco capitalists financed the development and subsidized the ferry service that provided West Seattle-Seattle transportation. The City of Seattle ran for 25 years, until 1913. Seattle also was the homeport for most of Puget Sound's "Mosquito Fleet" steamers, moderate sized boats that hauled cargo and passengers between the many small harbor towns that had developed alongside sawmills and other industries ("Milestones in King County History," www.historylink.org).

On June 6, 1889, the Great Seattle fire decimated the city's core when a pot of glue caught fire in a cabinet shop at 1st Avenue and Madison Street and quickly engulfed the building. This building was typical of virtually all of the buildings in the Seattle core at the time, constructed entirely of wood due to the plentiful supply of lumber pouring out of the local mills. A brisk wind spread the flames and by sunset more than 30 blocks of the city's commercial center had burned to ruins. City leaders rallied the citizenry to rebuild, this time with brick and stone, and by the end of the year 131 new structures had been built, many of them in what is now the landmark Pioneer Square Historic District (Ochsner 1994:xx; Spiedel 1967:238-246; "Milestones in King County History," www.historylink.org).

Seattle continued to grow and more than doubled in size on May 3, 1891, when a large area north of downtown, including the communities of Magnolia, Wallingford, Green Lake, Brooklyn (later renamed University District), and Ravenna were annexed to the city ("Milestones in King County History," www.historylink.org).

In 1893, the transcontinental Great Northern Railway reached Seattle, but so did the great economic panic of that year. The economic doldrums were finally broken in 1896 by the discovery of Klondike Gold. Seattle quickly became the jumping off point for miners going north to make their fortune, and numerous mining supplies and outfitting companies moved into empty or underutilized storefronts (Courtois and Associates 1999). Of the approximately 100,000 miners who started for the gold fields of Alaska, approximately 70,000 used Seattle as their point of departure (Mighetto and Montgomery 2002:xi). Klondike gold encouraged huge new developments in the city's commercial core. Several new hotels, restaurants, stores, bars, and brothels were built during this time, including the predecessors of such well-known businesses as Nordstrom's and Bartell Drugs (Mighetto and Montgomery 2002:xii).

In 1895, the University of Washington moved from its original downtown Seattle site to its current site along the shores of Lake Washington and Lake Union. The university retained possession of its Metropolitan Tract downtown for years. Eventually this downtown land became the core of the downtown business district with the Olympic Hotel being constructed on the location of the original University building (Crowley 1998).

The Denny Regrade was begun in 1898 to level 1st Avenue from Pine Street to Denny Way (just north of downtown Seattle); over time this project regraded an area of more than 60 city blocks. Excess dirt was dumped into the tidelands of Elliott Bay near Railroad Avenue (later renamed Alaska Way) and Western Avenue. The second phase of the Denny Hill regrade, located between 2nd Avenue and 5th Avenue, began in 1903. The 1904 construction of the Great Northern railroad tunnel beneath the city also allowed the scrapings of Denny Hill to be easily carried to the tidelands and dumped there (Spiedel 1967; “Milestones in King County History,” www.historylink.org).

Between 1890 and 1900, more than 80 percent of King County's population gain was in Seattle. The city established itself as the dominant urban area in Washington State and its rapid growth continued in the first decade of the new century. In 1900, a large Boston-based utility company bought out 22 competing street railways in Seattle as well as the main power company. Seattle voters countered the monopoly known as Puget Power by forming Seattle City Light in 1902 and by purchasing two streetcar lines in 1911 and 1913. In 1902, the Seattle City Council and the city's voters approved building the first municipally owned hydroelectric dam plant in the United States. Located one-half mile below Cedar Lake (renamed Chester Morse Lake), the Cedar Falls hydroelectric plant began lighting Seattle street lamps for the first time in 1905 (“Milestones in King County History,” www.historylink.org).

In 1903, the Seattle City Council forever changed the face of the city when it hired the Olmsted Brothers landscape architecture firm to develop a comprehensive plan for Seattle parks. Within 10 years Seattle has a park system that few could match. From 1903 to 1904, Seattle's newest tallest building and first steel-framed skyscraper was constructed. The Alaska Building, located at the southeast corner of 2nd Avenue and Cherry Street, was 14 stories high. It remained the tallest building in Seattle until the 18-story Hoge Building was completed in 1911. King Street Station opened in 1905, supporting both the Great Northern and Northern Pacific Railroads (Crowley 1998; Woodbridge and Montgomery 1980).

The Alaska-Yukon-Pacific Exposition ran for four months on the University of Washington campus in 1909. Similar to a World's Fair, the exposition was mandated by the legislature to display the resources, products, and advantages of Washington and the region. The Exposition also celebrated the 12 years of prosperity in Seattle since the 1897 Alaska Gold Rush (Woodbridge and Montgomery 1980).

In 1911, a long struggle for control of Seattle's central waterfront climaxed when King County voters approve the Port of Seattle district. The election served as a turning point for advocates of public control of essential facilities and utilities and a pivotal defeat for the railroads that had dominated Seattle's harbor since 1874. By 1917, the Port of Seattle was, after New York City, the busiest port in the nation (“Milestones in King County History,” www.historylink.org).

Seattle residents saw their first flying machine, a dirigible, during the Alaska-Yukon-Pacific Exposition in 1909. The efforts of Herb Munter, a self-educated engineer who was building his own aircraft in 1915, attracted the interest of William E. Boeing and a partner, who hired Munter to help them build their first airplane, the B&W, in 1916. America's entry into World War I in 1917 lifted the new Boeing Airplane Co. to prosperity. But the busy factory fell silent within a month of the signing of the Armistice in 1918. Military orders evaporated and Boeing had to resort to building furniture and speedboats. Boeing was rescued from the verge of bankruptcy by an Army order for upgrading DH-4 biplanes, but air mail ultimately delivered its post-war salvation ("Milestones in King County History," www.historylink.org).

In 1917, the Lake Washington Ship Canal and the locks leading to and from Puget Sound are completed. This is one of the most important public works projects in the history of King County. In October 1916, the water of Lake Washington was allowed to drop nearly nine feet to the level of Lake Union, a process that took three months and eliminated the Black River, the lake's natural outlet that drained out of the south end of Lake Washington (Ballard News Tribune 1988; Crowley 1998; Ochsner 1994:xxi).

In 1928, Seattle's first municipal airport opened south of the city. It is named Boeing Field because of the Boeing Airplane Company's proximity and because Boeing's Pacific Air Transport (later United Airlines) used it for regular airmail service. In 1933, the Boeing 247 took flight from this airport, ushering in a new era of air travel. At the time, the 247 was the fastest transport plane around, with a top speed well over 200 miles per hour. Appearing at the 1933 Chicago's World Fair, the plane proved a hit with visitors. In 1934, it won the Collier Trophy, which is given to great achievements in the field of flight. Regardless, the plane was practically obsolete as it entered service and was quickly overtaken by the competing Douglas Aircraft's DC-2; Boeing ended up selling only 75 of the model to airline companies (Berner 1992:176; "Milestones in King County History," www.historylink.org).

In 1940, the Lake Washington Floating Bridge opens, marking one effect of the automobile on Seattle's growth by connecting the large urban center to several small quiet towns (Bellevue, Redmond, and Kirkland) on the east side of the lake. At the time, the bridge was the largest floating structure ever built. In 1963, the Evergreen Point Floating Bridge was completed, further opening up suburban development on the east side of Lake Washington (Ochsner 1994:xxxii; "Milestones in King County History," www.historylink.org).

Fearing a second world war, the United States began to build up its armed forces in the late 1930s, which helped to revitalize the Depression-becalmed economy of greater Seattle. Following the attack on Pearl Harbor in 1941, the region's aircraft and ship builders shifted into high gear. Every sector of business and domestic life was affected by the war effort (Berner 1999; Ochsner 1994:xxx; "Milestones in King County History," www.historylink.org).

In 1949, the Port of Seattle opened the Seattle-Tacoma International Airport, at the time just an administration building and passenger terminal. Hailed as America's most advanced airport terminal, it has since all but disappeared within repeated expansions and modernizations. A few years later, Boeing brought out the prototype (Dash-80) for the commercial airliner; marketed under the company model number "707," it began commercial flights in 1958. The 707 was the first jet transport to win broad public and industry acceptance and thereby ushered in the modern "Jet Age" of airline travel. Building planes became an important part of the Seattle area's

economy; as a result, trends in the health of the airline industry often had a direct effect on the local economy. The strong association of Seattle with airplane construction spawned the nickname “Jet City;” the professional basketball team’s name “the Seattle Supersonics” and the original professional baseball team “the Seattle Pilots” carried forward this association. In 1969, Boeing produced the first 747 model, a jumbo jet airliner (“Milestones in King County History,” www.historylink.org).

In 1958, the Municipality of Metropolitan Seattle (Metro) was formed, initially with the purpose of cleaning up Lake Washington. At the time, 14 towns and cities in King County discharged 20 million gallons of inadequately treated sewage into Lake Washington every day. Voters approved Metro acknowledging that a solution to the sewage problem was beyond the capability of the county, towns and cities. Metro designed four wastewater treatment plants, more than 100 miles of large tunnels and interceptor sewers, and dozens of pumping stations over the next nine years and took over the publicly owned treatment works that were discharging into Lake Washington and connected them with treatment plants on Puget Sound (Ochsner 1994; “Milestones in King County History,” www.historylink.org).

In 1960, the U.S. Census enumerated the population of King County at 935,014 and that of Seattle at 557,087. King County’s population had increased by 27.5 percent in ten years. In the two previous decades, King County grew at a more rapid rate than Seattle even though a large area of King County had been annexed to Seattle. This describes the ongoing pattern of urban flight and the spread of suburban residential development (Ochsner 1994:xxxii; “Milestones in King County History,” www.historylink.org).

In 1960, King County voters approved a \$10 million bond issue for Port of Seattle development, including construction of revolutionary new cargo container facilities at Piers 46 and 28. The new cargo facilities were considered a gamble by many at the time, but the gamble paid off as the Port’s cargo tripled from 2.2 million tons in 1960 to 6.5 million tons in 1974 and revived Seattle as a destination for trade from Asia (“Milestones in King County History,” www.historylink.org).

The Seattle Century 21 World’s Fair ran for 184 days in 1962. The 74-acre fairgrounds would develop into Seattle Center, one of the city’s great community assets. The World’s Fair was conceived to celebrate the 50th Anniversary of the Alaska-Yukon-Pacific Exposition held on the University of Washington campus and had as its theme considering the possibilities of life in the 21st Century. It was truly a World’s Fair. In addition to a major science exhibit and dozens of corporate and state exhibits, 59 countries were represented in 20 foreign exhibits. The Space Needle, Monorail, Pacific Science Center, and a large public fountain, which have become Seattle landmarks, were constructed for the Fair (Ochsner 1994:xxxv; “Milestones in King County History,” www.historylink.org).

The Interstate-5 freeway was also built in 1962, furthering the trend of urban flight and allowing suburban residents to commute to the city for work. As a result, suburban community populations continued to grow at a faster rate than the city’s population. The I-5 freeway also had a huge effect on the city of Seattle, essentially dividing the city in half (Crowley 1998; Woodbridge and Montgomery 1980; Ochsner 1994:xxxvii).

Between 1960 and 1970, as the trend of movement to suburban residential communities continued, the Seattle population dwindled by more than 25,000. The population of the rest of King County, in contrast, had increased by 250,000 over the same time period. The total population of King County had grown to over one million persons. Boeing was the major factor in the county's growth (Ochsner 1994; "Milestones in King County History," www.historylink.org).

Ballard Segment

In 1852 Ira Utter made the first homestead claim in the area of future Ballard. The area's principal residents at that time were in the Native American villages located on the shores of Shilshole and Salmon Bays. The village of Shilshole, after which the bay was named (but which actually was on the shore of Salmon Bay), was occupied well after other natives relocated across Puget Sound under the terms of the 1855 Point Elliott Treaty (Ballard News Tribune 1988:11; Crowley 1998:179).

By 1865 all the prime land along Salmon Bay was occupied with homesteads. As the new settlers cleared their land, the treeline moved back away from the shoreline of the bay, exposing a scatter of small cabins and cottages surrounded by large stumps that couldn't be pulled or burned. Most homesteaders planted crops for their own subsistence. Utter improved his holdings to 820 acres by 1870, with about 200 acres cleared for farmland and pasture for cows. Ill of health, Utter visited his family in New York in 1871 and never returned to Salmon Bay. Commercial logging of Salmon Bay began in 1877, but the area grew slowly in comparison to Seattle just over Queen Anne Hill (Ballard News Tribune 1988:17-19).

Seattle's growth in the early 1880s prompted Judge Thomas Burke to purchase 720 acres north of Salmon Bay, much of it Utter's former holdings. Burke and his business partners intended to develop spur railroad lines to tie in with the Great Northern Railroad that was to enter Seattle from the North. The remainder of the land was to be sold as 10-acre or smaller parcels but sales were slow. When the acreage was surveyed for the parcel sales, the first five roads also were surveyed, but only four, Alaska, Utter, Skagit, and Puget Streets (renamed 15th, 12th, 20th, and 24th Avenues NW, respectively, when Ballard was annexed to Seattle), were given names at the time (Crowley 1998:179-180; Wandrey 1975:59).

In the late 1880s, William Ballard reluctantly took possession of 160 acres of logged-over land adjacent to Burke's land as payment on a business debt. Ballard joined with Burke and his business partners to create the West Coast Improvement Company (WCIC) and took a principal role in managing a new development venture. The WCIC intended to make money developing the area for residential and commercial use. It replatted much of the original 720 acres into 50-x-100- foot lots and named the new development Gilman Park. The WCIC built the first wagon bridge of puncheon across Salmon Bay in 1889 and brought in the railroad on the first railroad bridge across the bay in 1890. Ballard lent his name to the growing community when Gilman Park incorporated as a city in 1890. A census in that year counted 1,636 residents between Salmon Bay and the future 65th Street and the area grew rapidly as railroad and streetcar service expanded in the 1890s. Private ferries connected Ballard to nearby towns on the Sound. By 1892, the WCIC had sold two-thirds of the original Gilman Park land (Ballard News Tribune 1988:26-27; Crowley 1998:180; Wandrey 1975:65).

Industry in Ballard in the late 1800s and early 1900s was dominated by timber and for a time the area was one of the largest producers of shingles in the world. Jobs were plentiful as saw and shingle mills, the Ainsworth Steel works, and other manufacturing companies opened on Salmon Bay; a dozen sawmills were in operation in Ballard by 1895. Boatyards and shipyards were scattered along Salmon Bay's shore from the foot of 24th Avenue west around the point of the bay and north along the Shilshole Bay shore. These yards turned out every kind of fishing vessel used in the North Pacific and throughout the lower 48 states as well. Many small machine shops and boat and fishing related businesses were situated around the larger industrial buildings closer to the waterfront. Diners and residences predominated towards the north. The economic boom included many new buildings as Ballard Avenue became a business district attracting new merchants, land offices, saloons, and prostitution. In 1890 a trolley service reached Ballard. By the end of the decade, two streetcar lines were extended from Seattle; one of these streetcar routes was extended north along 15th Avenue NW in 1908 (Ballard News Tribune 1988:37-40, 285; personal correspondence, Michael Sullivan).

At the turn of the century, famine and unrest in Norway, and fear of the rising power of Germany, set off a mass migration of Scandinavians to the United States. Jobs in Puget Sound mills and fisheries attracted thousands to the Northwest and many settled in Ballard. Although Scandinavians never constituted more than a third of Ballard's population, they imprinted their strong ethnic identity on the community (Crowley 1998:181).

The town continued to grow and the business district expanded further north up Second and Fourth Avenues (now 20th Ave. NW and 24th Ave. NW, respectively) offering an increased array of goods and services. Street maintenance was always a problem where the former forest floor now was well-traveled streets and sidewalks. For years the mud and dust of Ballard roads had been planked over, or a center strip constructed. In 1903, a plan to pave the streets and to put in cement sidewalks was met with delight by the residents. But by 1906, forced by drought (Ballard's municipal services, particularly the water supply, could not keep up with growth) the citizens voted to be annexed to Seattle. After annexation, retail activity slowly shifted away from Ballard Avenue to Market Street, which became the new business district by the 1930s. In part this shift followed the trend of increasing automobile use (Ballard News Tribune 1988:71-72; Crowley 1998:181).

Development of the Ship Canal dominated Ballard politics for much of its early history. Large commercial interests in Ballard favored the canal because it would make shallow Salmon Bay accessible to larger ships, an impediment that had favored its use by the smaller boats of the fishing fleet. The concept of a canal through Lake Union (so named because of the canal proposal) to Lake Washington was raised as early as 1854, however construction did not begin until 1911. The first ship did not pass through the canal until 1916. Several competing canal proposals (e.g., Black River to Duwamish River, through Beacon Hill to the Duwamish tidelands, from south Lake Union to Smith Cove) were debated, each supported by different industrial and political interests before the current route won out. An initial attempt to excavate the cuts necessary between the different bodies of water, funded by private monies, ended when the money ran out with relatively little accomplished. The project included numerous engineering challenges, not the least of which was the difference in elevation of the three bodies of water. This was ultimately resolved by construction of a large lock at Salmon Bay (excavation for which dug through the Native American village of Shilshule) and a deep cut at Montlake. The project resulted in a drop of nine feet in the level of Lake Washington. This threatened the

large salmon migrations into Lake Washington for which Salmon Bay had been named. This was resolved by installation of a public fish ladder at the mouth of Salmon Bay. Bridges over the canal were built over the next decade and work on the canal was not declared complete until 1934. In 1956 the locks were officially named the Hiram M. Chittenden Locks in honor of the U.S. Army Corps of Engineers District Engineer who oversaw its construction (Ballard News Tribune 1988:87-94; Crowley 1998:182-183).

The shingle industry declined in the 1920s as other materials became preferred for roofing. The Great Depression of the 1930s halted most residential construction further reducing demand for shingles and temporarily closing sawmills around Puget Sound. But other industries in Ballard helped the area through the Depression. Shipbuilding continued to provide jobs, and the fishing industry survived with the help of tax relief passed by the State legislature. In 1930, two-thirds of the North Pacific halibut fleet made Ballard its home port. In 1936, the Port of Seattle acknowledged the importance of the fishing fleet to the local economy by supporting construction of a new wharf at the fisherman's terminal at the south end of the old Ballard Bridge. Ballard's sawmills emerged from the economic downturn earlier and quicker than did many other Seattle area industries, but several mills never reopened. By the late 1950s, changing markets and pressure from other Ballard businesses to clean up the air pollution generated by the mills ultimately led to closure of the last mills (Ballard News Tribune 1988:101-102, 293).

The original vehicle bridge across Salmon Bay, built in 1917, was replaced by the current Ballard Bridge in 1940; the latter was placed in the National Register of Historic Places in 1982 as part of the Historic Bridges/Tunnels in Washington State multiple property nomination. Heightened use of the automobile led to the displacement of many of the houses and small shops along 15th Avenue NW with auto oriented drive up services and retailers, small commercial structures, discount stores, supermarkets with expansive parking areas, low-rise offices, and small commercial additions to existing residences.

Also in 1940, the first cross-town bus route was established, linking Ballard to the University District and connecting with the two north-south streetcar lines in Ballard. This followed a trend of residents selling or renting the old working class family bungalows in the Ballard core area and moving to the outskirts and building newer, larger homes. In time, many of the smaller homes in the downtown area fell into disrepair and became targets for developers seeking to offset rising property values by constructing apartment buildings. Since the 1970s, there has been a move back into the Ballard core area by young homebuyers who often purchased older rental houses and restored them. The old Ballard Avenue business district, located west of the project APE, was designated a Seattle Historic Landmark District in 1976 (Ballard News Tribune 1988:109, 219, 296).

Interbay/Magnolia Segment

The southern end of the Interbay/Magnolia Segment was initially settled by David Denny and Thomas Mercer in 1853. Denny's claim included the area between today's Denny Way and Mercer Street, extending all the way to the shore of Elliott Bay. Mercer claimed the area to the north of today's Mercer Street. Several other claims made later that year included the adjacent Smith Cove shoreline. Denny platted 500 acres into building lots, but not until the prosperity of the 1880s did people move to the area. It became known as "Queen Anne Town" because people built homes in that architectural style, which was popular at the time. Kinnear Park is named for

one of the earliest residents of the area. Except for the development of a small commercial district adjacent to the west of today's Key Arena, the area was largely residential until the World's Fair, after which the area was transformed with numerous small office and light industrial buildings (Crowley 1998:168; Sheridan 2002:30-31).

The area called Interbay, the valley between Queen Anne and Magnolia hills and between Smith Cove and Salmon Bay, were tide flats and a salt marsh when the first Euroamericans arrived. Dr. Henry Smith claimed the south part of Interbay in 1853 and cut a trail through the woods, three miles to Seattle as an alternative to travel by canoe. Another settler, Edmund Carr, laid claim to the south side of Salmon Bay. More settlers arrived and filed claims in the area, making their livings farming and logging. During the Indian uprising of 1856 many of the Interbay settlers homes were burned and their stock driven off. Smith's cabin was spared, apparently a tribute to his good relations with his Native American neighbors. Smith would later be the source for a widely circulated account of the speech of Chief Seattle during an 1854 visit of Territorial Governor Isaac Stevens ("Milestones in King County History," www.historylink.org).

Over time, the swampy areas were filled with soil from regrade operations and with garbage. In 1891, the community of Boulevard received a post office, the name to be changed to Interbay three years later, and it was annexed to Seattle. In 1893, the Great Northern Railway arrived in Seattle, following a route from the north down the shore of Puget Sound, across Salmon Bay and Interbay, to Seattle. The Great Northern's first depot was at Smith's Cove before moving to Railroad Avenue (now Alaska Way) downtown. The railroad purchased 600 acres for the Interbay depot and built a roundhouse, a switchyard and giant piers to service transpacific steamships. The area collected industries that could take advantage of transportation. A varied industrial center grew up around the shipping terminals, with a rope-making factory, a paint manufacturer, a brewery, a brick kiln, saw mills, furniture factories, and other manufacturers. The hillsides became home to workers. Slavic and Finnish immigrants employed in nearby mills established a community there (Crowley 1998:170-171; Sheridan 2002:31; "Milestones in King County History," www.historylink.org).

Steep terrain along the west edge of Queen Anne Hill kept development close along the waterfront, while the railroad zone and subsequent traffic arterials of Elliott Avenue W and 15th Avenue NW impeded residential development and direct access to the waterfront. The plateau-like hill of Magnolia was slow to develop because the railyards in the Interbay area and Smith Cove separated it from the rest of the city. In the early decades of the 1900s, a complicated system of wooden trestles was constructed to provide access over the rail yards to Magnolia. It was not until 1930 that a high-level bridge provided convenient vehicle access (Sheridan 2002:31; personal correspondence, Michael Sullivan).

The Port of Seattle, organized in 1911, took over a portion of the former Great Northern railyard to develop the longest earth-filled piers (90 and 91) in the world at the time. During the Maritime Strike of 1934, Smith's Cove was the scene of a violent encounter between Seattle police and striking Longshoremen who were blocking access to a pier. World War II saw a tremendous increase of activity when the U.S. Navy commandeered the Port of Seattle's facilities at Smith Cove. Piers 90 and 91 became the focus of the Seattle Port of Embarkation and tens of thousands of troops passed through en route to combat in the Pacific. This role continued through the Korean War after which the Navy returned control of the area to the Port. Seattle became known

nationally for the warmth of its welcome for returning servicemen (Crowley 1998:170-171; "Milestones in King County History," www.historylink.org).

Construction of Fisherman's Terminal on Salmon Bay began in 1913 as a small dock and a single building. Its construction, funded by the Port of Seattle, was overshadowed by the large construction project in progress across the bay (the locks project). The purpose of the terminal was to provide "snug harbor" for Puget Sound's fishing fleet. The terminal was expanded several times during the 1930s and 1940s; by the 1940s, Fisherman's terminal was servicing over 1,000 boats.

In 1953, improved moorage, dry-docking, boat and engine repair, maintenance, and supply facilities were added. The most recent expansion of Fisherman's Terminal came in 1987 (Magnolia - Thumbnail History, "Milestones in King County History," www.historylink.org).

In 1923 15th Avenue West became a major north-south thoroughfare with the completion of Elliott Avenue West to the south. As automobile influence increased, street side commercial buildings developed along either side of the road paralleling the railway. Both streets are now primarily commercial rather than industrial, although several clearly recognizable remnants of the industrial part remain, most notably (Sheridan 2002:31). The Port of Seattle developed 152 acres of the area that had been relinquished by previous industrial uses as a facility for automobile imports and exports through Terminal 91. Other areas have been transformed by the city of Seattle into play fields and a 9-hole golf course ("Milestones in King County History," www.historylink.org; personal correspondence, Michael Sullivan).

Seattle lagged behind other Northwest port cities in developing grain storage accessible to seagoing freighters; Portland took the dominant role in exporting grain from eastern Washington and Oregon. In the 1960s, the Port of Seattle sought to amend this trend by building the grain terminal at Pier 86. The new terminal's capacity was 4.2 million bushels and could load 3,000 tons of grain per hour onto tankers tied up to the offshore docking facility. The onshore grain storage facility is located in what is now Myrtle Edwards Park, which occupies the shoreline of Elliott Bay along the Monorail's proposed Interbay/Magnolia Segment from the north end of downtown to Smith Cove (Burke 1976:107; Sale 1976:234).

Queen Anne/Seattle Center/Belltown and Downtown/Pioneer Square Segments

In 1852 Arthur Denny led the original settlers from Alki to an area of flat land and a low swampy island that is now Pioneer Square. Later that year Denny and two other pioneering landowners donated land to Henry Yesler to locate a steam sawmill there, initiating the economic center in the Northwest that Seattle would become. Initially a lumber and fishing village, growth was limited by topography and history. The thick forests and steep slopes of First Hill and Capitol Hill, and the broad tidelands of Elliott Bay to the south of present day Pioneer Square were not attractive to prospective homesteaders. Neither was the so-called "Battle of Seattle" during a one-day uprising by local Indians in 1856 that got nationwide newspaper coverage. As such, by 1862 the population was just 182.

The city incorporated in 1869 with Lake Washington as the eastern boundary, but growth was slow through the 1870s, with a population of just over 3,500 by the end of the decade. Still, commercial development north along Front Street (now First Avenue) required the first of many

street-grading projects. Following the discovery of rich coal fields near Renton, and the development of railroad lines to deliver the coal to wharves on Elliott Bay, the pace of growth increased (Courtois and Associates 1999:80; Crowley 1998:17-18, 29-31; Woodbridge and Montgomery 1980:100, 103).

A huge influx of people to Washington Territory in the 1880s made the territory eligible for statehood. Many of the immigrants settled in the Seattle area, with the population reaching almost 45,000 by 1890. A business district rose quickly in the area of Pioneer Square, built with the plentiful lumber that was flooding onto ships for export from numerous sawmills, then burned to the ground on June 6, 1889. Sixty-four acres of the downtown core between the waterfront and Fourth Avenue and from Union Street to Jackson Street was destroyed by the fire. But the local economic boom assured that the downtown was quickly rebuilt, this time using brick and stone instead of wood. The city streets also were raised a full story above their original level to overcome the downtown's flooding and sanitation problems, and the first floor of the adjacent buildings became "Underground Seattle" (Crowley 1998:20-21, 33; Woodbridge and Montgomery 1980:103).

By 1891, developers had platted most of the land within the city limits but were hampered in their plans by the varied topography, especially a number of tall hills close to the downtown core. As the downtown commercial district expanded to the north along First and Second Avenues in the years following the fire, city engineers took on the task of leveling steep grades and hills. The largest project, the Denny Hill regrade, took nearly three decades to complete, the material being used to fill the shallow tidelands of Elliott Bay. By the time it was completed, the Depression had descended and development in the newly available area of Belltown was limited (Courtois and Associates 1999:81; Woodbridge and Montgomery 1980:103).

In order to facilitate real estate development, local businessmen organized a number of private, independent streetcar companies, beginning in the mid-1880s. The downtown core was the destination for the new rail lines, with Second Avenue between Yesler Way and Pike Street provided a primary route. Second Avenue also was the widest of the downtown streets. Additional routes were on Western, First and Third Avenues. Growth progressed out from downtown in a linear fashion along the routes of the new streetcar lines, accelerating residential development outside of the commercial core. Residential growth in these areas included both single and multifamily dwellings, built without any of the present-day zoning restrictions. (Courtois and Associates 1999:81; personal correspondence, Michael Sullivan).

The Great Northern Railroad arrived in the early 1890s, bringing an influx of commerce which helped Seattle recover from the crash of 1893, and together with serving as the gateway to the Alaska Gold Rush of 1897, sustained an economic boom into the early 1900s. The railroads brought in design influences of the Chicago architectural styles and the World's Columbian Fair. Many of these designs and the relation to the streetscape predate the automobile, relating more directly with rail based transportation (Crowley 1998:48-49; personal correspondence, Michael Sullivan).

An electrical system was introduced around 1890 to light downtown buildings and power an electric tramway. By the early 1900s, there was a municipal water and sewer system. The University of Washington, originally located at Fourth Avenue and University Street, was relocated to its current location in 1895 clearing the way for a proposed new central business

district called the Metropolitan Tract. Prior to this property becoming available, most large buildings were built along First and Second Avenues, continuing the trend of expansion of the city's business district to the north out of Pioneer Square. Many of the new downtown buildings were constructed with the newfound technology of structural steel frames clad by terra cotta, much of which was locally mined and fired, giving the new central business district a consistent look. The Alaska Building (1904 - Seattle's first steel-frame skyscraper), the National Bank of Commerce (1908 – one of the first to feature terra-cotta), the Majestic Theatre (1909 – now the Commercial Building), and the Hoge Building (1911 - the tallest in the city for a short time) all were built along the proposed Green Line route (Crowley 1998:48-49, 95; Woodbridge and Montgomery 1980).

In 1916, the Frederick & Nelson department store (now Nordstrom's) was built at the “distant” corner of Fifth Avenue and Pine Street. The Bon Marche followed in 1926 at Fourth and Pine. These two large retail stores added even more pedestrians to the nest of streetcars, interurban trains, and automobiles that converged at Westlake Mall producing the city's busiest intersection. Several grand theaters sprung up in the surrounding area including the Orpheum (1927) located on the Westlake Mall (Crowley 1998:96).

Buildings went up slowly in the Metropolitan Tract at first, with most large building projects occurring in lower downtown. Despite a regional economic slowdown through the 1920s, commercial construction in downtown Seattle continued until the stock market crash of 1929 dried up development capital. Construction of the southern Second Avenue core, including the 42-story Smith Tower (1914), the Dexter Horton Building (1924), and the Hartford Building (1929) occurred during this period. One of the last buildings constructed during this early building boom was the Exchange Building (1930), which also was one of Seattle's last and most stylish Art Deco skyscrapers. By this time, most new business construction was happening “uptown” in the vicinity of the Metropolitan Tract. As the new business district developed and thrived, Pioneer Square slid into decline; a “Hooverville” developed along the waterfront south of the Square during the Great Depression (Crowley 1998; Woodbridge and Montgomery 1980).

Pike Place Market, a block west of the proposed Green Line route, is a Seattle icon made up of a “maze of structures that have housed a continuously operating public farmers' market and miscellaneous other merchants since 1907” (Crowley 1998:77). The Market grew out of consumers' suspicions that middlemen who bought local farmers products and resold them to grocers and restaurants were colluding to drive up prices. The first public farmers market day, promoted by announcements in the city's newspapers, attracted thousands of potential customers to the intersection of First Avenue and Pike Street despite a rainstorm. But only about a dozen farmers with product to sell came to the first market day. Seeing a good thing, developers built a permanent arcade to house the rapidly growing number of farmers and vendors, and the Outlook Hotel and the Triangle Market followed the next year. The market area was expanded in 1910 and again in 1911 and a few years later the Fairley (Main Market) Building was erected. By 1917, all the main buildings of the current market were in place. The neon sign and giant clock were added around 1930. Over the years the Market resisted numerous attempts to close, relocate, or change it so substantially it would have repelled the public. The decline of truck farms in the suburban areas of Seattle, the gradual move by residents out of the city's core, and the growth of supermarkets led to the Market's economic and physical decay by the mid-1950s. By the 1960s, the Urban Renewal movement threatened the Market with destruction and the

“Friends of the Market” organized to fight a seven-year battle to preserve it that ended in a voters initiative that came out in their favor (Crowley 1998:78-84).

Another product of the early 20th-century period of sustained commercial building in downtown was the crowding out of most residences from the area. By 1910, the year the area’s population hit 250,000, expansion of streetcar lines had created residential suburbs on all the hills ringing the city center and had reached beyond Lake Union to the north. Well-to-do residential enclaves developed along Lake Washington, also accessible to downtown by streetcars. Industries too moved out of the downtown core, relocating to the north along Elliott Bay, around Lake Union, and onto the newly filled tidelands south of Pioneer Square (Courtois and Associates 1999:81; Woodbridge and Montgomery 1980:104).

World War II brought many people to Seattle, most coming to work in industries suddenly flush with federal Defense funds. But economic growth was centered around industrial facilities beyond downtown (e.g., Boeing in the south industrial district and Renton) and in the suburbs. In the years after World War II, the population in Puget Sound continued to surge, more than doubling over the next 30 years as local industries adapted from defense contractors to producing civilian products (Woodbridge and Montgomery 1980; Berner 1999).

Seattle manifested a prevailing spirit of optimism about the future in preparing for the World’s Fair in 1962. The area of the fairgrounds, now the Seattle Center, had been dubbed “Potlatch Meadows” by early settlers who thought the Duwamish people held tribal festivals there. In 1903, a baseball and recreation park was constructed there and later was used for circuses and carnivals. The surrounding area was largely single family residential. David Denny homesteaded in the vicinity until 1928. “That year, the city opened a new Civic Auditorium (now the Opera House)...[and an] ice arena and a 35,000-seat athletic field were added soon after. The army built a large armory (now the Center House) in 1939, and the Seattle public schools completed Memorial Stadium for high school football games in 1948” (Crowley 1998:125-126; personal correspondence, Michael Sullivan).

Ten million people visited the Seattle World’s Fair. The fair left a permanent legacy to the city in the form of the Seattle (Civic) Center, a major cultural and recreational complex at the edge of the downtown. The Seattle Symphony, Seattle Opera, and Seattle Repertory Theatre all made buildings at Seattle Center their home. The “Century 21” theme of the fair produced visionary architecture, including the Coliseum (built to house the “World of Tomorrow” exhibit), the Monorail, the Pacific Science Center, and the Space Needle, which despite high-rise construction in downtown continues to be a significant Seattle landmark. As originally constructed, the Needle had a 50-foot flame of natural gas on top, and was the tallest structure west of the Mississippi River at the time (Kreisman 1999:57-58).

The portions of Belltown north of Second Avenue developed primarily into small service companies, auto showrooms, small manufacturing establishments, parking lots, apartment buildings, high rise offices and the 1962 monorail route following the Denny Regrade. The downtown area did not pull out of the dormancy induced by the Great Depression until the mid-1950s with selection of a new company to continue the development of the Metropolitan Tract. Most of the downtown large building construction projects that followed concentrated in that area, describing a trend of increasing occupation of Fourth Avenue by financial institutions. But Second Avenue saw the construction of the Norton Building in 1960, Seattle’s first aluminum

and glass curtain-walled office tower. The Norton Building represented the corporate image that would follow with construction of numerous other such buildings in downtown, culminating in the Seattle First National Bank (1969 - referred to by critics as “the box the Space Needle came in”). Disagreements arose over the future of Westlake Mall, which had declined rapidly despite being the southern terminus of the Monorail since 1962. Various plans for closing the Mall to traffic have been debated since the 1950s, always opposed by retailers citing the need to be able to compete with stores in the suburbs (Crowley 1998; Woodbridge and Montgomery 1980).

“At the same time, the city ushered in a comprehensive plan that focused public attention on key issues. New interests in historic preservation, adaptive reuse of older buildings, revitalization of old neighborhoods and the creation of new environments for living in downtown were beginning to surface. Efforts in these areas, particularly in the 15-year period from 1970 through 1985, resulted in the establishment of Seattle’s international and national preservation reputation. The city established historic district protection for Pioneer Square in 1970 and the Pike Place Market in 1971.... The city adopted its Landmarks Preservation Ordinance in 1973” (Kreisman 1999:7-8) and established the Historic Seattle Preservation and Development Authority in 1974.

SODO/Chinatown International District/Pioneer Square Segment

Originally, the Seattle Industrial District consisted of the muddy tidelands of Elliott Bay, which extended well south and east of its current shoreline, bordered to the north by Pioneer Square and on the east by the base of Beacon Hill. When the Denny party took their initial claims in Elliott Bay in 1852, the north end of the SODO/Chinatown International District/Pioneer Square segment consisted of a saltwater lagoon that, as the city developed, was filled in with refuse and debris. Upon building Seattle’s first sawmill in 1854, Henry Yesler began to dump sawdust from the mill into the lagoon and tidelands beginning what would be a long history of infilling of the tidelands off Seattle. This area and around the tidelands to the south represented the less desirable part of the new town; by the late 1800s, Washington Street between First and Third Avenues became a center of prostitution and gambling (Hart Crowser, Inc. 1996:H-3 – H-5).

Railroad companies had an early interest in the tidelands of south Elliott Bay. Coal from mining operations in eastern King County and Renton traveled on rail lines built on raised trestles across the mudflats to a wharf at the bottom of King Street. In 1880, several smaller railroad companies merged and the shops, roundhouse, and major operational area for the new railroad were built on pilings over the tideflats. The yard covered the blocks between First and Second Avenues south of King Street (on the northwest side of Seahawks Stadium). Minimal planning and building standards created a jigsaw puzzle of wharves, piers and frame warehouses over the water, accessed from the landward side by raised plank roadways. In addition to the railroad company, commercial ventures consisted of machine shops, liverys, laundries, a foundry, shipping company offices, and several hotels. Many of these businesses were destroyed in the Seattle fire in 1889. Ballast, sawdust, dirt, and refuse continued to be dumped into the area to reclaim land (Hart Crowser, Inc. 1996:H-5 – H-6).

One of the first decisions of the legislature of the new State of Washington was to allow publicly owned tidelands to be sold to private parties to spur their development (Hart Crowser, Inc. 1996:H-6). The strong interest railroad companies had in the reclaimed tidelands spurred investments, which eventually resulted in \$150,000,000 in land transfers. As the filling of the tidelands progressed, the Oregon and Washington Railroad, a subsidiary of the Union Pacific

Railroad, and the Great Northern Railroad Company pushed their tracks further out into the fill until reaching their current locations (Phelps 1978:62-3).

Nestled between water and steep hills, Seattle's early settlers faced limitations as to where they could construct buildings. In 1895, Eugene Semple, Washington's last territorial governor, addressed this issue by proposing the straightening of the Duwamish River, filling in of the tidelands, and his ill-fated plan to dig a canal from the Sound to Lake Washington through Beacon Hill. Semple anticipated that this canal would compliment the Lake Washington Ship Canal, which catered to the needs of ships traveling at the north end of the city, by providing a southern point of access to the lake. Although the project was slow to start with only 175 acres of tidelands reclaimed by 1900, the newly filled land sold almost as quickly as it was filled (Dorpat 1998:171; Berner 1991:17).

In 1908, director of the Seattle Engineering Department, Reginald H. Thomson, recognized the growth potential of the Duwamish Valley. He directed attention to the need for areas to accommodate the city's factories and provide inexpensive transportation to carry products. He therefore advocated improvements along the Duwamish through deepening its channel and filling in tidelands. Semple and other business men had formed the Seattle and Lake Washington Waterways Company, to contract with the State for the opportunity to dredge at the head of the Duwamish and fill the adjacent 1525 acres of tidelands (Phelps 1978:61). The Company orchestrated the dredging of the Duwamish to a depth of 26 feet and width of 500 feet. At a development cost of four to five thousand dollars per acre, this land was reportedly worth much more filled for the eventual use as factory sites (Phelps 1978:62). [Demuth and Montgomery 2001:4-1]

In addition to the sediment obtained from the dredging of the Duwamish River, the 1907-1910 Jackson Street Regrade leveled a portion of a hill located east of Pioneer Square and the 1909-1912 Dearborn Street Regrade removed a saddle between that hill and Beacon Hill, providing fill for the northern part of the SODO project segment. The new neighborhood created by the Jackson Street Regrade was occupied by a gradual shift to the south and east of Seattle's first Chinatown. This shift was furthered by the extension of Second Avenue South through the heart of old Chinatown in 1928, which destroyed many of the older buildings. The new Chinatown developed into today's International District (Courtois and Associates 1999:111).

Initially, the filled lands did not have a formal grid overlay dividing the area into uniform plots; rather the primary spatial organization reflected the divisions and patterns of industrial land use. These divisions developed around the defining waterway and the railroad line routes. Roads and streetcar lines were secondary to the waterways and railroad line right-of-ways (personal correspondence, Michael Sullivan).

Platted in 1919, the newly developed mudflat was destined for industrial development. Its many acres of flat treeless land included easy access to railroad lines and open space for industrial development. Historical maps show the initial development...clustering around the Oregon Washington Railroad tracks that follow (5th Avenue South). Early in the 1900s, the Great Northern Railroad paralleled the Oregon Washington line, but ended at Massachusetts St. By the

1940s, the Great Northern Railroad extended its line north just beyond Connecticut St. [Demuth and Montgomery 2001:4-1]

The Great Northern Railroad built the King Street Station in 1905, followed by the Oregon Washington Railroad's Union Station in 1911. By 1916, the railroad yards and freight houses dominated the SODO/Chinatown International District/Pioneer Square project area and industrial development has continued to be the predominant land use to the present (Hart Crowser, Inc. 1996:H-8). The widths of roads reflected loading and unloading needs associated with industrial activities, use of wagons to transport products and raw materials, the need to turn wagons with a full team of mules or horses, and later arterial truck transportation. Consequently, parcel sizes were often irregular in shape and of varying sizes. Electric streetcars were later introduced, running along First Avenue South, as well as a trestle for an elevated rail system installed in 1919 to transport workers to and from work, and then dismantled in 1929 (personal correspondence, Michael Sullivan).

The historic environment of the SODO/Chinatown International District/Pioneer Square area has undergone numerous changes over the years. Most of the original buildings have changed ownership and use one or more times (Demuth and Montgomery 2001:4-2). Prior to World War II, the predominate pattern consisted of a major industrial building with adjacent and often interconnected outbuildings and a yard for loading products and unloading supplies. The Depression saw the last stages of the railroads and construction of associated buildings. As the Depression deepened, industrial and railroad buildings were dismantled to construct shanties that covered large tracts of SODO. World War II brought about the removal of these shantytowns to make way for the rapid expansion of wartime industries. Boeing Field development and associated new construction filled the SODO area with industrial buildings having heavy concrete or steel frame bearing walls and steel I beam roof assemblies. During and post World War II, the primary pattern featured a monolithic industrial complex housing all or nearly all aspects of production and often loading and unloading for a particular industry. This eliminated the multitude of outbuildings and brought the former yard function into the building interior (personal correspondence, Michael Sullivan).

The area primarily includes factories and businesses developed to meet this region's shipping and storage needs. Vernacular buildings with large warehouse massing and simple construction dominate the area's architecture (Demuth and Montgomery 2001:4-2).

West Seattle Segment

"West Seattle has historically been the most isolated and independent of all Seattle neighborhoods. A large area located on a peninsula, it was an independent city before annexation into Seattle. Its settlement pattern and commercial districts have been shaped by a succession of transportation modes, first by ferries, then by streetcars, and finally by bridges and roadways" (Sheridan 2002:34).

"The first ferry began running in December 1888, landing at the bottom of the steep bluff south of Duwamish Head. The first streetcar was a cable car line ascending the steep hillside to the main street, California Avenue" (Sheridan 2002:34). Around the turn of the century, West Seattle was made up of a few widely scattered neighborhoods of varying character. The highest elevations to the north (incorporated West Seattle) contained elegant homes. The resort area of

Alki lay to the west and was made up mostly of a scatter of vacation cottages. And the steel plant workers community of Youngstown [renamed Delridge in 1940] was to the southeast at the head of a swamp above the Duwamish River. The rest of the peninsula was a timber-covered wilderness, home to deer, cougars, and bears (Eals 1987).

A recently prepared study entitled *Historic Property Survey Report: Seattle's Neighborhood Commercial Districts* (Sheridan 2002) provides a concise history of the development of West Seattle. The following paragraphs come from this study.

Alki, the site where the Denny party first landed, was a prosperous resort by the turn of the century. While its exposed location was not ideal for settlement, it proved ideal for enjoying the sun and the water. [The Stockade Hotel resort] was built in 1903, followed in 1905 by a large salt-water pool and a bathing pavilion.

The beach came to be lined with dozens of summer cottages. [Steamboats] came from Seattle directly to a pier at the base of Bonair Drive. Eventually a boardwalk was built east to Duwamish Head, where an amusement park known as Luna Park was built in 1907.... The steep slopes kept the area separate from West Seattle, and visitors [to Alki] probably did not even consider themselves as going to the city of West Seattle.

West Seattle incorporated as a city in 1902, covering most of the area from Duwamish Head south to Lander Street. At this time the commercial district had three or four grocery stores and a...drugstore. The city soon decided that it could not expand further without improved transportation. West Seattle earned its place in transportation history when it issued bonds for the first municipally owned streetcar system in the United States. Until then, all the streetcars...had been privately owned and operated. It was not until 1912 that Seattle built its first municipal streetcar line.

In the first decade of the 20th century, the streetcar line was expanded to tie together the vast area of West Seattle and encourage development in the wilderness areas to the south. Service was extended south to Fauntleroy Park and east to Youngstown in 1907. At that time the "Junction" at California Avenue and Alaska Street was a swamp, with no roads south of Lander Street. The only commerce was a few real estate offices.

[In 1907,] residents of West Seattle and adjoining areas voted to annex land as far south as Roxbury Street (the current city boundary) and east to Youngstown. This made the fledgling city a substantial entity, with an area of 19.6 square miles. However, only weeks later...West Seattle voted to be annexed to Seattle, in order to obtain better electric and water service, sewers and fire protection. [Youngstown got its] name from the major industry that still dominates the northern portion of the neighborhood. In 1905 the Seattle Steel Company plant was built on the tideflats in an area then called Humphrey. The new name of Youngstown was selected in recognition of the major steel town in Pennsylvania. The plant was purposely located outside of Seattle to avoid taxes, but was annexed in 1907 with the rest of West Seattle. Youngstown's jobs attracted

numerous workers who built modest homes and a number of businesses, particularly saloons. [Sheridan 2002:34-35]

West Seattle experienced growth in waves, with the first wave resulting from the spread of rails and roads. The spread of the streetcar lines from the area of incorporated West Seattle to the south opened broad forested areas to development and a real estate boom ensued as incorporation into the city of Seattle made greater public services available. Local politicians and business interests promoted residential real estate and the ideal of homeownership for West Seattle (Eals 1987). The diversity of neighborhoods and house styles reflects the growth of West Seattle as a residential area through all the major political and economic trends of the 1900s.

New houses initially concentrated along the streetcar lines, generating small scale housing booms whenever a new line was added. This close association between residential building and the streetcar routes meant that most of the houses did not have garages, leading to the current awkward appearance of subsequent garage additions. But houses soon spread out from the streetcar lines, filling in neighborhoods around the occasionally rough topography as the timber was logged. View lots along the tall bluffs of West Seattle were initially favored. Street layout along the perimeter of West Seattle was affected by the waterfront and hill contours, but a grid and more uniform platted lots were possible in the inner portions of the peninsula. By the 1920s, new attitudes about what made a good neighborhood had largely forced out the last cows and chickens from the growth centers. About this time the first apartments were built in the area originally incorporated as West Seattle, much to the chagrin of residents who prized the area for its “class.” But growth was slow in most other places on the peninsula and no major housing projects were started through the 1930s as the Great Depression led to a decline in investment and wages (Eals 1987; personal correspondence, Michael Sullivan).

After the growth spurt following annexation to Seattle, West Seattle’s progress continued to be associated with transportation, primarily bridges, that made it practical for downtown business owners and workers alike to reside there. “The peninsula was first connected to Seattle by a streetcar running on a wooden trestle. The first Spokane Street drawbridge was not dedicated until 1924, [terminating at the west end at the historic community of Riverside]. In 1943 a viaduct was constructed to connect the bridge directly with California Avenue at Admiral Way. In the 1950s a longer structure, known as the Fauntleroy Expressway, was constructed to connect the bridge with Fauntleroy Way and the California/Alaska Junction. These improvements greatly enhanced access between West Seattle and downtown Seattle” (Sheridan 2002:35). Many of the commercial buildings in Riverside, including the landmark Hotel West, survived until construction of the high level West Seattle Bridge in the 1980s.

The commercial districts have followed the pattern of the streetcars, with commercial nodes primarily on California Avenue Southwest, with major centers at SW Admiral Way, SW Alaska Street, and Fauntleroy Way [Morgan Junction]. The larger West Seattle Junction area, extending east from California Avenue to Fauntleroy Way clearly shows different development periods and the influences of changing transportation modes. California Avenue reflects its pre-automobile origins, with predominantly one- and two-story buildings with small storefronts extending to the sidewalk. Going east on Alaska Street and Fauntleroy Way, which were redeveloped after completion of the Fauntleroy expressway, the

streetscape is more auto-oriented, with larger structures and numerous parking lots. [Sheridan 2002:35]

The end of the Depression finally seemed to come to West Seattle when two large housing projects, totaling nearly 600 homes, were initiated in 1941. Later that year the Federal Works Agency selected West Seattle to locate a development of 1,300 units of inexpensive defense worker housing in response to the nationwide gear-up for wartime production. Some local residents were fiercely opposed to the development, but it clearly contributed to West Seattle thriving through the 1940s-50s. Much of the commercial development along California Avenue after the war consisted of small retail shops and the conversion of residences for small business use (Eals 1987).

HISTORICAL RESOURCES INVENTORY

ENTRIX conducted field evaluations to identify historical resources that may be eligible for historic registers. The inventory considered resources that are 50 years of age and, in accordance with SEPA, considered any noteworthy resources over 25 years old. For the entire APE, 728 resources were reviewed in the field (see Appendix 3). Resources of potential significance or that would be demolished (Category B) were further assessed to determine eligibility for the NRHP, WHR, or listing as Seattle City Landmarks. Eligible Category B resources, along with previously known (Category A) historic resources, are presented in Table NN-1 by segment. Table NN-1 provides each resource's inventory number, address, and historical significance. The property addresses listed were obtained from the City of Seattle GIS database. The location of each Category A, B, and C resource is also identified on segment maps that cite historical resources by inventory number (Appendix 3). The location of historic resources listed in or determined eligible for historic registers is shown in Figures NN-6 (Ballard Segment), NN-7 (Interbay/Magnolia Segment), NN-8 (Queen Anne/Seattle Center/Belltown, and Downtown/Pioneer Square segment), NN-9 (SODO Segment), and NN-10 (West Seattle Segment). Agency correspondence regarding the historical significance of evaluated resources is included in Appendix 1.

Ballard Segment

The field inventory in the Ballard Segment identified 140 resources in the APE. This segment consists of residential, commercial, and industrial buildings, with commercial and industrial properties increasing in density to the south approaching Salmon Bay and the older part of Ballard. Nineteen of the 140 historical resources were Category A or B resources, which were researched and evaluated for listing in the NRHP, or as Seattle Landmarks if the properties were to be demolished (Figure NN-6 and Table NN-1).

There are five historically significant resources in the Ballard Segment. The Ballard Bridge (B-140) is listed in the NRHP. Four additional buildings, including an industrial plant (B-132), a restaurant (B-131), an apartment building (B-114), and a residence (B-60), were determined eligible for inclusion in the NRHP.

Interbay/Magnolia Segment

The north end of the Interbay/Magnolia Segment is characterized by commercial and industrial structures, while the south end has an increased number of residential buildings, especially

single-family homes. In the Interbay/Magnolia Segment, 102 resources were identified in the APE and 39 properties were Category A or B resources. Each Category B resource was further researched and evaluated for listing in the NRHP, or as Seattle Landmarks if the properties were to be demolished (Figure NN-7 and Table NN-1).

Eleven resources in the Interbay/Magnolia Segment are listed in or have been determined eligible for historic registers, including three residences (I-19, I-25, and I-26), Tsubota Steel and Pipe (I-52), Leibold Communications, Inc. (I-66), the Ace Tank complex (I-72, I-73, I-74), Wilson Machine Works (I-80), Phillips Scale Co. (I-86), and a Fisherman's Terminal building (I-1C).

Queen Anne/Seattle Center/Belltown Segment

Thirty-two resources were identified in the APE of the Queen Anne/Seattle Center/Belltown Segment. Apart from the Seattle Center itself, this segment consists of a mix of high-density residential (apartments) and small- to medium-sized commercial buildings. In addition, an increase in the amount of space occupied by parking facilities occurs, especially adjacent to the Seattle Center complex. Fourteen resources within the Queen Anne/Seattle Center/Belltown Segment were Category A or B resources. The Category B resources were researched and further evaluated for listing in the NRHP, or as Seattle Landmarks if the properties were to be demolished (Figure NN-8 and Table NN-1).

Nine resources within the Queen Anne/Seattle Center/Belltown Segment are listed in or eligible for historic registers. The historically significant resources within this segment include: four apartment buildings (SC-7, SC-8, SC-13, and SC-20); Center House (SC-15); Monorail Terminal, Office, and Track (SC-16); Memorial Stadium (SC-22); Space Needle (SC-31); and the Seattle Center Fountain (SC-32).

Downtown/Pioneer Square Segment

The Downtown/Pioneer Square Segment includes the original center of development of the City of Seattle (Pioneer Square) and one of the first areas to be expanded as the city grew into the region's dominant commercial center. It includes both the Pioneer Square and Pike Place historic districts. Despite the replacement of many of the original commercial buildings over the years, numerous historical buildings remain (see Historical Context Statement). A large number of resources were identified in the project APE, which included four alternatives. Minor variation exists between the proposed alternatives.

Many of the resources within this segment have been previously listed in the NRHP and as Seattle Landmarks as part of the Pike Place Public Market Historic District, Pike Place Market Historical District, Pioneer Square Historic District, and Pioneer Square Preservation District. The NRHP Pike Place Public Market Historic District boundaries extend roughly from Western Avenue on the west, Pike Street on the south, First Avenue on the east, and Virginia Street on the north. The local Pike Place Historical District has similar boundaries, but extends further south to Union Street. The NRHP Pioneer Square Historic District extends roughly from Alaskan Way to the West, South King Street to the south, Fourth and Fifth Avenues South to the east, and Columbia, Cherry, James, and Jefferson Streets to the north. The NRHP district boundaries extend further in several areas, including the area bordered by First and Occidental Avenues

South, south of South King Street. The local Pioneer Square Preservation District boundaries encompass most of this same area, but include more territory, including the area bordered by First and Occidental Avenues South, south of South King Street, and a dock at the foot of South Washington Street.

The historic resources within these districts are located in both the Green Line's SODO/Chinatown International District/Pioneer Square and Downtown/Pioneer Square segments. In order to evaluate affected resources and effects to these resources as part of a single historic district, all historic resources within the Pioneer Square Historic District and Pioneer Square Preservation District have been assessed as part of the Downtown/Pioneer Square Segment. Consequently, in contrast to the other studies conducted for the EIS, the southern boundary of the Downtown/Pioneer Square Segment for the Historical Resource Study is at S. King St.

Within this segment, a total of 166 resources including the Pioneer Square and Pike Place Public Market historic districts and downtown areaways were identified. Within the segment are 90 historic resources including the Pioneer Square areaways (D-127), Times Square Building Areaway (D-128), and Columbia Building Areaway (D-129). The areaways, within the Pioneer Square Historic District are eligible for the NRHP and have been identified as one resource (D-127). The following three Pioneer Square Historic District areaways would have the potential of being affected by the Green Line and have been assigned specific resource numbers: Sinking Ship Garage Areaway (D-127a), Butler Garage Areaway (D-127b) and Broderick Areaway (D-127c). A previously prepared study of Pioneer Square areaways (Parsons Brinkerhoff and Sheridan Consulting Group 2003) is included in Appendix 5. Appendix 6 includes *The Green Line EIS Areaways Study*, a historical evaluation of 34 areaways that are outside the PSHD, but within the APE. This study identified two areaways (D-128 and D-129) that are eligible for the NRHP. Due to the large number of historically significant resources within this segment, a summary of the resource types has not been provided in the text; however, a complete list of the historic resources that possess significance within the Downtown/Pioneer Square Segment (listed by alternative) may be found in Table NN-1, and also was included in the documentation provided to SHPO and the City of Seattle.

SODO/Chinatown International District/Pioneer Square Segment

As noted above, historic resources in the Pioneer Square Historic District and Pioneer Square Preservation District were evaluated as part of the Downtown/Pioneer Square Segment. Consequently, in contrast to the other studies conducted for the Draft Environmental Impact Statement, the SODO Segment historical resources study considers the areas south of S. King Street. The field inventory in the SODO/Chinatown International District/Pioneer Square Segment identified 61 resources in the APE. The SODO area is a commercial and industrial part of the city that exhibits a land-use trend initiated by the railroads that built trestles over the Elliott Bay tidelands before the tidelands were filled. Railroad companies moved quickly to occupy the reclaimed lands as filling progressed. A series of recent public stadium projects has altered the northernmost portion of the SODO/Chinatown International District/Pioneer Square segment, but many older commercial buildings remain south of Safeco Field.

Seven historical resources within this segment were identified as Category A or B resources, which were researched further and evaluated for listing in the NRHP, or as Seattle Landmarks if

the properties were to be demolished (Figure NN-9 and Table NN-1). Three resources were determined eligible for the NRHP: the Markey Machinery Building (S-58), Rainier Cold Storage Building A (S-61), and the Bank of America branch (S-26).

West Seattle Segment

The West Seattle APE is largely residential with small businesses and houses remodeled for commercial use clustered around major street intersections. The field inventory of the West Seattle Segment identified 227 resources. Thirty-four of the resources were Category A or B resources, which were researched further and evaluated for listing in the NRHP, or as Seattle Landmarks if the properties were to be demolished (Figure NN-10 and Table NN-1).

Fourteen resources within the West Seattle Segment possess historical significance. The Curious Kidstuff (WS-97); Farmers Insurance Group Building (WS-143); Cherry Creek Furniture (WS-81); and Easy Street Records (WS-82) buildings were previously determined eligible as Seattle Landmarks (Sheridan 2002). The Farmers Insurance Group Building (WS-143), Cherry Creek Furniture (WS-81), Easy Street Records (WS-82), Nucor Steel Mill (WS-14); two apartments (WS-116 and WS-117) and five residences (WS-129, WS-148, WS-151, and WS-154,) were determined eligible for the NRHP.

In response to new West Seattle alternatives (6.3, 6.4 and 6.5) introduced after the publication of the Draft EIS, project historians researched properties adjacent to the new alternatives. As part of this additional research, the Seattle Landmark-listed Cooper School (WS-187), Seattle Landmark-eligible Boysen Apartments, and Shack Coffee Shop (WS-189) are eligible for the NRHP.

**Table NN-1
Inventory of Historic Properties**

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
Ballard Segment, Alternative 1.1 - West Side of 15th							
B-3	Residence 8720 16th Avenue NW	Ineligible					Lack of hist. sign.
B-8	Radio Shack 8701 15th Avenue NW	Ineligible					Alterations
B-11	Washington Karate Assoc. 8339a 15th Avenue NW	Ineligible					Lack of hist. sign.
B-12	Allstate Insurance 8339b 15th Avenue NW	Ineligible					Alterations
B-13	Residence 8339c 15th Avenue NW	Ineligible					Alterations
B-19	Residence 8323 15th Avenue NW	Ineligible					Lack of hist. sign.
B-29	Bogart, Bremmer & Bradley Antiques, 8000 15th Avenue NW	Ineligible					Alterations
B-35	Residence 7743 15th Avenue NW	Ineligible					Lack of hist. sign.
B-38	Residence 7729 15th Avenue NW	Ineligible					Lack of hist. sign.
B-40	Residence 7725 15th Avenue NW	Ineligible					Lack of hist. sign.
B-60	Residence 7353 15th Avenue NW	Eligible			X		
B-64	Residence 7334a 15th Avenue NW	Ineligible					Lack of hist. sign.
B-65	Arts Café 7334b 15th Avenue NW	Ineligible					Lack of hist. sign.
B-105	Residence 6543 15th Avenue NW	Ineligible					Alterations
B-114	Apartments 1505 NW 60th Street	Eligible			X		
B-117	Residence 1509 NW 59th Street	Ineligible					Lack of hist. sign.
B-131	Mike's Chili Parlor 1447 NW Ballard Way	Eligible			X		
B-132	Brekke Co. Steel Fabricators 1526 NW 46th Street	Eligible	X				
B-140	Ballard Bridge	NRHP			X		
Ballard Segment, Alternative 1.2 - Center of 15 th							
[same properties as Alternative 1.1]							
Interbay/Magnolia Segment, Alternative 2.1- West Side of 15th/Center of Elliott							
I-4	Commercial Building 3443a Thorndyke Ave. W.	Ineligible					Lack of hist. sign.
I-5	Residence 3443b Thorndyke Ave. W.	Ineligible					Alterations

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
I-16	State Farm Insurance 3206 16th Ave. W.	Ineligible					Alterations
I-25	Residence 3036 16th Ave. W.	Eligible			X		
I-26	Residence 3032 16th Ave. W.	SLE					
I-27	Residence 3020 16th Ave. W.	Ineligible					Alterations
I-28	Residence 2816 15th Ave. W.	Ineligible					Alterations
I-29	Residence 2810 15th Ave. W.	Ineligible					Alterations
I-34	Accucraft Collision Center Office 2600b 15th Ave. W.	Ineligible					Lack of hist. sign.
I-37	Residence 2512 15th Ave. W.	Ineligible					Alterations
I-38	Commercial Building 1600a W. Armory Way	Ineligible					Alterations
I-48	Commercial Building 1600b W. Armory Way	Ineligible					Lack of hist. sign.
I-50	Commercial Building 1907 15th Ave. W.	Ineligible					Alterations
I-52	Tsubota Steel and Pipe 1641a 15th Ave. W.	Eligible	X				
I-55	E-Z Mini Storage 1634 15th Ave. W.	Ineligible					Alterations
I-66	Leibold Communications Inc. 1450 15th Ave. W.	Eligible	X				
I-72	Ace Tank 1123a Elliott Ave. W.	Eligible	X				
I-73	Ace Tank 1123b Elliott Ave. W.	Eligible	X				
I-74	Ace Tank 1123c Elliott Ave. W.	Eligible	X				
I-75	Gardico 1111 Elliott Ave. W.	Ineligible					Lack of hist. sign.
I-80	Wilson Machine Works 1038 Elliott Ave. W.	Eligible	X		X		
I-81	Blackstock Lumber 1039a Elliott Ave. W.	Ineligible					Alterations
I-82	Blackstock Lumber 1039b Elliott Ave. W.	Ineligible					Alterations
I-84	Contract Hardware 945a Elliott Ave. W.	Ineligible					Lack of hist. sign.
I-85	Commercial Building 945b Elliott Ave. W.	Ineligible					Alterations
I-86	Phillips Scale Co. 934b Elliott Ave. W.	Eligible			X		
I-91	West Farm Foods 635a Elliott Ave. W.	Ineligible					Alterations
I-95	Chen's Village 544 Elliott Ave. W.	Ineligible					Lack of hist. sign.

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
I-97	Magnolia Bridge Viaduct and Extension	Ineligible					Alterations
Interbay/Magnolia Segment, Alternative 2.1.1 - West Bridge Connection							
I-1C	Residence and Storage Fisherman's Terminal	Eligible	X				
Interbay/Magnolia Segment, Alternative 2.1.2 - Far West Bridge Connection							
I-1B	Seattle Ship Supply Fisherman's Terminal	Ineligible					Alterations
Interbay/Magnolia Segment, Alternative 2.2 - Center of 15th/West Side of Elliott							
I-1A	Bakketun and Thomas Boat Company Fisherman's Terminal	Ineligible					Alterations
I-1C	Residence and Storage Fisherman's Terminal	Eligible	X				
I-7	Residence 3442 15th Ave. W.	Ineligible					Lack of hist. sign.
I-8	Residence 3440 15th Ave. W.	Ineligible					Lack of hist. sign.
I-11	Residence 3416 15th Ave. W.	Ineligible					Lack of hist. sign.
I-15	Residence 3218 15th Ave. W.	Ineligible					Lack of hist. sign.
I-16	Residence 3206 15th Ave. W.	Ineligible					Alterations
I-19	Residence 1414 Dravus St.	Eligible	X		X		
I-28	Residence 2816 15th Ave. W.	Ineligible					Alterations
I-29	Residence 2810 15th Ave. W.	Ineligible					Alterations
I-34	Accucraft Collision Center Office 2600b 15th Ave. W.	Ineligible					Lack of hist. sign.
I-37	Residence 2512 15th Ave. W.	Ineligible					Alterations
I-38	Commercial Building 1600a W. Armory Way	Ineligible					Alterations
I-48	Commercial Building 1600b W. Armory Way	Ineligible					Lack of hist. sign.
I-50	Commercial Building 1907 15th Ave. W.	Ineligible					Alterations
I-52	Tsubota Steel and Pipe 1641a 15th Ave. W.	Eligible	X				
I-55	E-Z Mini Storage 1634 15th Ave. W.	Ineligible					Alterations
I-66	Leibold Communications Inc. 1450 15th Ave. W.	Eligible	X				
I-72	Ace Tank 1123a Elliott Ave. W.	Eligible	X				
I-73	Ace Tank 1123b Elliott Ave. W.	Eligible	X				

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
I-74	Ace Tank 1123c Elliott Ave. W.	Eligible	X				
I-75	Gardico 1111 Elliott Ave. W.	Ineligible					Lack of hist. sign.
I-80	Wilson Machine Works 1038 Elliott Ave. W.	Ineligible					Alterations
I-81	Blackstock Lumber 1039a Elliott Ave. W.	Ineligible					Alterations
I-82	Blackstock Lumber 1039b Elliott Ave. W.	Ineligible					Alterations
I-84	Contract Hardware 945a Elliott Ave. W.	Ineligible					Lack of hist. sign.
I-85	Commercial Building 945b Elliott Ave. W.	Ineligible					Alterations
I-86	Phillips Scale Co. 934b Elliott Ave. W.	Eligible			X		
I-91	West Farm Foods 635a Elliott Ave. W.	Ineligible					Alterations
I-95	Chen's Village 544 Elliott Ave. W.	Ineligible					Lack of hist. sign.
I-97	Magnolia Bridge Viaduct and Extension	Ineligible					Alterations
Interbay Operations Center							
I-99	1600 West Armory Way	Ineligible					Lack of hist. sign.
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.1 - Seattle Center/Republican							
SC-7	7 Queen Anne Ave. N.	Eligible			X		
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible*			X		
SC-13	Queen Anne Apartments 505 1st Ave. N	Eligible			X		
SC-14	Northwest Rooms 305 Harrison St.	Ineligible					Alteration
SC-15	Center House (Seattle Center) 305 Harrison St.	Eligible			X		
SC-22	Memorial Stadium Seattle Center	Eligible	X				
SC-16	Monorail Terminal, Office, and Track Seattle Center	Eligible	X				
SC-25	Zak's Saloon 206 5th Ave. N.	Ineligible					Alteration
SC-28	Seattle Electric Works (now vacant) 118 5th Ave. N.	Ineligible					Alteration
SC-29	Office 112 5th Ave. N.	Ineligible					Alteration
SC-30	Fat City Motors 508 Denny Way	Ineligible					Alteration
SC-31	Space Needle 305 Harrison St.	Eligible, Listed SL	X		X		

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
SC-32	Seattle Center Fountain 305 Harrison St.	Eligible	X		X		
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.2 - Mercer							
SC-7	7 Queen Anne Ave. N.	Eligible			X		
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible*			X		
SC-13	Queen Anne Apartments 505 1st Ave.	Eligible			X		
SC-14	Northwest Rooms 305 Harrison St.	Ineligible					Alteration
SC-20	Auditorium Apartments 605 5th Ave. N.	Eligible			X		
SC-25	Zak's Saloon 206 5th Ave. N.	Ineligible					Alteration
SC-28	Seattle Electric Works (now vacant) 118 5th Ave. N.	Ineligible					Alteration
SC-29	Office 112 5th Ave. N.	Ineligible					Alteration
SC-30	Fat City Motors 508 Denny Way	Ineligible					Alteration
SC-31	Space Needle 305 Harrison St.	Eligible, Listed SL	X		X		
SC-32	Seattle Center Fountain 305 Harrison St.	Eligible	X		X		
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.3 - Thomas							
SC-7	7 Queen Anne Ave. N.	Eligible			X		
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible*			X		
SC-13	Queen Anne Apartments 505 1st Ave.	Eligible			X		
SC-15	Center House (Seattle Center) 305 Harrison St.	Eligible			X		
SC-16	Monorail Terminal, Office, and Track Seattle Center	Eligible	X				
SC-25	Zak's Saloon 206 5th Ave. N.	Ineligible					Alteration
SC-28	Seattle Electric Works (now vacant) 118 5th Ave. N.	Ineligible					Alteration
SC-29	Office 112 5th Ave. N.	Ineligible					Alteration
SC-30	Fat City Motors 508 Denny Way	Ineligible					Alteration
SC-31	Space Needle 305 Harrison St.	Eligible, Listed SL	X		X		
SC-32	Seattle Center Fountain 305 Harrison St.	Eligible	X		X		
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.5 - Second/Denny							

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
SC-7	7 Queen Anne Ave. N.	Eligible			X		
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible*			X		
SC-13	Queen Anne Apartments 505 1st Ave.	Eligible			X		
SC-16	Monorail Terminal, Office, and Track Seattle Center	Eligible	X				
SC-28	Seattle Electric Works (now vacant) 118 5th Ave. N.	Ineligible					Alteration
SC-29	Office 112 5th Ave. N.	Ineligible					Alteration
SC-30	Fat City Motors 508 Denny Way	Ineligible					Alteration
SC-31	Space Needle 305 Harrison St.	Eligible	X		X		
SC-32	Seattle Center Fountain 305 Harrison St.	Eligible	X		X		
Downtown/Pioneer Square Segment, Alternative 4.1 - West Side of Second							
D-1	Zeek's Pizza 419 Denny Way	Ineligible					Alteration
D-2	Seattle, Chief of the Suquamish Statue 5th Ave., Denny Way, and Cedar St.	Listed NR, SL			X		
D-3	Golden Singha Thai Cuisine 415 Cedar St.	Ineligible					Alteration
D-5	2619 5th Ave.	Eligible			X		
D-7	420 Vine St.	Eligible			X		
D-9	521 Wall St.	Ineligible					Alteration
D-10	Fire Station No. 2 2318 4th Ave.	Eligible			X		
D-11	American Games 2235 5th Ave.	Ineligible					Alteration
D-12	Retail Store 2225 5th Ave.	Ineligible					Alteration
D-13	2221 5th Ave.	Ineligible					Lack of hist. sign.
D-15	2217 5th Ave.	Ineligible					Alteration
D-16	2211 5th Ave.	Ineligible					Alteration
D-17	420 Blanchard St.	Eligible			X		
D-18	5th Avenue Court Apartments 2132 5th Ave.	Eligible			X		
D-20	Top Pot Doughnuts 2124 5th Ave.	Ineligible					Lack of hist. sign.

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
D-23	2100 5th Ave.	Ineligible					Alteration
D-24	Jordon Building 2030 5th Ave.	Ineligible					Alteration
D-26	Sheridan Apartments 2011 5th Ave.	Eligible			X		
D-27	Griffin Building 2005 5th Ave.	NRHP ineligible Potential SLE					
D-29	Ford Graphics 1923 5th Ave.	Ineligible					Alteration
D-30	Nation 1921 5th Ave.	Ineligible					Alteration
D-31	Avis 1913 5th Ave.	Ineligible					Alteration
D-32	Old Annex Theatre 1912 4th Ave.	Ineligible					Alteration
D-33	Centennial Building 1900-1910 4th Ave.	Eligible		X	X		
D-34	Times Square Building 414 Olive Way	Listed NR, SL			X		
D-35	McGraw Square 5th Ave, Westlake Ave., Olive Way, and Stewart St.	NRHP Ineligible, SL					
D-36	Mayflower Park Hotel 1630 4th Ave.	Eligible			X		
D-37	Securities Building 1904 3rd Ave.	Eligible			X		
D-38	Bon Marche 300 Stewart St.	Eligible, Listed SL			X		
D-39	Bergman's Luggage 1907 3rd Ave.	Ineligible					Alteration
D-40	Josephinum Hotel 1900 2nd Ave.	Listed NR, SL			X		
D-42	Caffe D'Arte 125 Stewart St.	Eligible			X		
D-43	Inn at the Market 1601 1st Ave.	Listed NR (INT.) PPHD					
D-44	Atwood Hotel 101 1st Ave.	Ineligible					Alteration
D-45	Schoenfeld Building 1601 2nd Ave.	Ineligible					Alterations
D-46	Triangle Market 1532 Pike Pl.	Listed NR PPHD					
D-47	First and Pine Building 1535 1st Ave.	Listed NR PPHD					
D-48	The Gatewood 111 1st Ave.	Ineligible					Alterations
D-49	Doyle Building 1527 2nd Ave.	Listed NR					
D-50	Haight Building (2nd and Pike Building) 211 Pine St.	Eligible			X		

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
D-51	United Shopping Tower/ Olympic Tower 217 Pine St.	Listed NR, SL			X		
D-52	Green Tortoise Hostel 1521 2nd Ave.	Ineligible					Alterations
D-54	Corner Market Northwest Corner of 1st Ave. and Pike St.	Listed NR PPHD					
D-56	Liberty Jewelry and Loan 114 Pike St.	Ineligible					Alterations
D-57	Eitel Building 1511 2nd Ave.	Eligible			X		
D-58	Melbourne Tower 212 Pike St.	Ineligible					Alteration
D-59	Economy Market Southwest Corner of 1st Ave. and Pike St.	Listed NR PPHD					
D-64	Hadfield Building 1201 2nd Ave.	Eligible, Listed SL					
D-65	Seneca Building 1205 2nd Ave.	Ineligible					Alteration
D-66	Baillargeon Building 1100 2nd Ave.	Eligible					
D-67	Federal Reserve Bank Building 1015 2nd Ave.	Eligible			X		
D-68	Exchange Building 821 1st Ave.	Eligible, Listed SL			X		
D-69	Puget Sound Bank (Bank of California) 815 2nd Ave.	Eligible, Listed SL			X		
D-71	814 2nd Ave.	Ineligible					Alteration
D-72	Seattle Trust and Savings Bank 804 2nd Ave.	Eligible					
D-73	Hong Kong and Shanghai Banking Corporation Clock 720 2nd Ave.	Eligible, Listed SL					
D-74	Foster and Marshall Building 720 2nd Ave.	Eligible					
D-75	Chamber of Commerce Building 215 Columbia St.	Eligible					
D-76	Metsker Maps 700 1st Ave.	Listed NR PSHD	X		X		
D-77	Hoge Building (Carson Boren Home Site) 705 2nd Ave.	Listed NR, SL			X		
D-78	Dexter Horton Building 710 2nd Ave.	Eligible, Listed SL		X			
D-79	Mutual Life Building 605 1st Ave.	Listed NR PSHD	X		X		
D-80	Lowman Building 107 Cherry	Listed NR PSHD	X		X		

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
D-81	Seattle's Best Coffee 619 2nd Ave.	Listed NR PSHD	X		X		
D-82	Alaska Building 618 2nd Ave.	Listed NR PSHD	X		X		
D-83	Grand Opera House 213 Cherry St.	Ineligible					Alteration
D-85	Pioneer Building, Pergola and Totem Pole 606 1st Ave.	Listed NR PSHD	X		X		
D-86	Butler Garage 601 2nd Ave.	Listed NR PSHD	X		X		
D-87	610 2nd Ave.	Listed NR PSHD	X		X		
D-88	Hartford Building 600 2nd Ave.	Listed NR PSHD	X		X		
D-89	Lyon Building 601 3rd Ave.	Eligible			X		
D-90	Café Paloma 93 Yesler Way	Listed NR PSHD	X		X		
D-91	Tully's Coffee 99 Yesler Way	Listed NR PSHD	X		X		
D-92	Collins Building 520 2nd Ave.	Listed NR PSHD	X		X		
D-93	519 3rd Ave.	Listed NR PSHD	X		X		
D-94	512 2nd Ave.	Listed NR PSHD	X		X		
D-95	Smith Tower 502 2nd Ave.	Listed NR, SL PSHD	X		X		
D-96	Merchant's Café 109 Yesler Way	Listed NR PSHD	X		X		
D-97	Bohemian Nightclub 115 Yesler Way	Listed NR PSHD	X		X		
D-98	Flanagan and Lane 102 Yesler Way	Listed NR PSHD	X		X		
D-99	Metropole Market 423 2nd Ave. Ext. S.	Listed NR PSHD	X		X		
D-100	201 Yesler Way	Listed NR PSHD	X		X		
D-101	Frye Apartments 223 Yesler Way	Listed NR PSHD	X		X		
D-102	408 2nd Ave. Ext. S.	Listed NR (INT.) PSHD	X		X		
D-103	411 2nd Ave. Ext. S.	Listed NR (INT.) PSHD	X		X		
D-104	410 2nd Ave. Ext. S.	Listed NR (INT.) PSHD	X		X		
D-105	The Last Supper Club 124 S. Washington St.	Listed NR PSHD	X		X		
D-106	401 2nd Ave. Ext. S.	Listed NR (INT.) PSHD	X		X		

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
D-107	406 2nd Ave. Ext. S.	Listed NR PSHD	X		X		
D-108	400 2nd Ave. Ext. S.	Listed NR PSHD	X		X		
D-109	165 S. Washington St.	Listed NR PSHD	X		X		
D-110	McCoys Firehouse 173 S. Washington St.	Listed NR (INT.) PSHD	X		X		
D-111	201 S. Washington St.	Listed NR PSHD	X		X		
D-112	Union Gospel Mission 211 S. Washington St.	Listed NR (INT.) PSHD	X		X		
D-113	Mathews and Chesnin Attorneys 219 S. Washington St.	Listed NR PSHD	X		X		
D-114	Union Gospel Mission 221 S. Washington St.	Listed NR PSHD	X		X		
D-115	313 2nd Ave. Ext. S.	Listed NR PSHD	X		X		
D-116	208 2nd Ave. Ext. S.	Listed NR PSHD	X		X		
D-117	Masins Fine Furniture 220 S. Main St.	Listed NR PSHD	X		X		
D-118	Comedy Underground 222 S. Main St.	Listed NR PSHD	X		X		
D-119	Seattle Fire Department Fire Prevention 220 3rd Ave.	Listed NR PSHD	X		X		
D-120	213 S. Main St.	Listed NR PSHD	X		X		
D-121	222 S. Main St.	Listed NR PSHD	X		X		
D-122	James Harris Gallery 307 2nd Ave. Ext. S.	Listed NR PSHD	X		X		
D-123	Seattle Lighting Fixture Co. 210 2nd Ave. Ext. S.	Listed NR (INT.) PSHD	X		X		
D-124	Vacant 208 S. Jackson St.	Listed NR PSHD	X		X		
D-125	Leathers/Gourmet Sausage Co. 315 S. Jackson St.	Listed NR PSHD	X		X		
D-126	King Street Station 301 S. Jackson St.	Listed NR PSHD	X		X		
D-127	Pioneer Square Historic District Areaways	Eligible	X				
D-127a	Sinking Ship Garage Areaways	Eligible	X				
D-127b	Butler Garage Areaway 601 Second Ave.	Eligible	X				
D-127c	Broderick Building Areaway 619 Second Ave.	Eligible	X				
D-128	Times Square Building Areaways	Eligible (Pending SHPO)	X				

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
D-129	Columbia Building Areaway	Eligible (Pending SHPO)	X				
D-130	1427 3 rd Avenue	Ineligible					Alterations
D-131	Pike Place Public Market Historic District	Listed NRHP, SL	X		X		
D-132	Pioneer Square Historic District	Listed NRHP, SL	X		X		
intrusion PPHD/PSHD = an intrusion is a building that falls within the boundaries of the historic district but is not a contributing structure to that district.							
Downtown/Pioneer Square Segment, Alternative 4.2 - East Side of Second with Crossover							
[same properties as Alternative 4.1]							
Downtown/Pioneer Square Segment, Alternative 4.3 - Center of Second							
[same properties as Alternative 4.1]							
Downtown/Pioneer Square Segment, Alternative 4.4 – East of Center							
[same properties as Alternative 4.1]							
Downtown/Pioneer Square, Preferred Alternative							
[same properties as Alternative 4.1]							
SODO/Chinatown International District/Pioneer Square Segment, Alternative 5.1 - East Side of Third/Utah							
S-40	2931 1st Ave. S.	Ineligible					Lack of hist. sign.
S-42	2959 Utah Ave. S.	Ineligible					Lack of hist. sign.
S-44	2951 1st Ave. S. (Bldg. B)	Ineligible					Lack of hist. sign., Alterations
S-56	PSF Industries, Inc. 65 S. Horton ST.	Ineligible					Lack of hist. sign.
S-58	Markey Machinery Co. 79 S. Horton St.	Eligible			X		
S-61	Rainier Cold Storage Building A, SE corner of S. Horton St. and Colorado	Eligible	X				
SODO/Chinatown International District/Pioneer Square Segment, Alternative 5.2 - West Side of Third/Utah							
S-26	Bank of America 2764 1st Ave. S.	Eligible			X		
S-40	2931 1st Ave. S.	Ineligible					Lack of hist. sign.
S-44	2951 1st Ave. S. (Bldg. B)	Ineligible					Lack of hist. sign., Alterations
S-56	PSF Industries, Inc. 65 S. Horton ST.	Ineligible					Lack of hist. sign.
S-58	Markey Machinery Co. 79 S. Horton St.	Eligible			X		
S-61	Rainier Cold Storage Building A, SE corner of S. Horton St. and Colorado	Eligible	X				
West Seattle Segment, Alternative 6.1 - West Seattle I							

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
WS-14	Nucor Steel Mill 2424 SW Andover St	Eligible	X				
WS-20	Residence 2821 SW Yancy St	Ineligible					Lack of hist. sign.
WS-22	Residence 2831 SW Yancy St	Ineligible					Lack of hist. sign.
WS-25	Residence 2841 SW Yancy St	Ineligible					Lack of hist. sign., Alterations
WS-27	Residence 2851 SW Yancy St	Ineligible					Lack of hist. sign., Alterations
WS-33	Residence 3036 SW Avalon Way	Ineligible					Lack of hist. sign., Alterations
WS-37	Residence 3051 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-38	Residence 3055 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-45	Residence 3275 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-47	Residence 3279 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-76	West Seattle Nails 4201 SW Alaska St	Ineligible					Alterations
WS-77	Dentists Office 4729 42nd Ave SW	Ineligible					Lack of hist. sign., Alterations
WS-81	Cherry Creek Furniture 4554 California Ave. SW	SLE					Alterations
WS-82	Easy Street Records 4302 Alaska Street	SLE					Alterations
WS-97	Curious Kidstuff 4740 California Ave SW	SLE					Alterations
WS-116	Apartment 5202 California Ave. SW	Eligible			X		
WS-117	Apartment 5206 California Ave. SW	Eligible			X		
WS-123	Affirmations 5405 California Ave SW	Ineligible					Lack of hist. sign., Alterations
WS-129	Residence 5440 California Ave SW	Ineligible					Lack of hist. sign.
WS-132	Residence 5458 California Ave SW	Ineligible					Lack of hist. sign.
WS-139	A Better Roofing 5643 California Ave SW	Ineligible					Lack of hist. sign.
WS-143	Farmers Insurance Group 5922 California Ave SW	Eligible			X		
WS-146	Residence 5927 California Ave SW	Ineligible					Lack of hist. sign.
WS-148	Residence 5933 California Ave SW	Eligible			X		
WS-151	Residence 5948 California Ave SW	Eligible			X		

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
WS-154	Residence 5956-5958 California Ave SW	Eligible			X		
WS-161	Residence 6021 California Ave SW	Ineligible			X		Lack of hist. Sign.
WS-171	Paint Your Wagon 6055 California Ave SW	Ineligible					Alterations
West Seattle Segment, Alternative 6.2 West Seattle II							
WS-6	Residence 3847 23rd Ave SW	Ineligible					Lack of hist. sign.
WS-13	Seattle Style Salon 3860 Delridge Way SW	Ineligible					Lack of hist. sign., Alterations
WS-14	Nucor Steel Mill 2424 SW Andover St	Eligible	X				
WS-25	Residence 2841 SW Yancy St	Ineligible					Lack of hist. sign., Alterations
WS-27	Residence 2851 SW Yancy St	Ineligible					Lack of hist. sign., Alterations
WS-33	Residence 3036 SW Avalon Way	Ineligible					Lack of hist. sign., Alterations
WS-37	Residence 3051 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-38	Residence 3055 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-45	Residence 3275 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-47	Residence 3279 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-76	West Seattle Nails 4201 SW Alaska St	Ineligible					Alterations
WS-81	Cherry Creek Furniture 4554 California Ave SW	SLE					Alterations
WS-82	Easy Street Records 4302 Alaska St	NRHP, SLE			X		
WS-104	Residence 4737 44th Ave SW	Ineligible					Lack of hist. sign.
WS-108	Residence 4815 Erskine Way SW	Ineligible					Lack of hist. sign.
WS-116	Apartment 5202 California Ave. SW	Eligible			X		
WS-117	Apartment 5202 California Ave. SW	Eligible			X		
WS-123	Affirmations 5405 California Ave SW	Ineligible					Lack of hist. sign., Alterations
WS-129	Residence 5440 California Ave SW	Eligible			X		
WS-132	Residence 5458 California Ave SW	Ineligible					Lack of hist. sign.
WS-139	A Better Roofing 5643 California Ave SW	Ineligible					Lack of hist. sign.
WS-143	Farmers Insurance Group 5922 California Ave SW	Eligible			X		

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
WS-146	Residence 5927 California Ave SW	Ineligible					Lack of hist. sign.
WS-148	Residence 5933 California Ave SW	Eligible			X		
WS-151	Residence 5948 California Ave SW	Eligible			X		
WS-154	Residence 5956-5958 California Ave SW	Eligible			X		
WS-161	Residence 6021 California Ave SW	Ineligible					Lack of hist. sign.
WS-171	Paint Your Wagon 6055 California Ave SW	Ineligible					Alterations
WS-184	Residence 6715 California Ave SW	Ineligible					Lack of hist. sign.
West Seattle Segment, Alternative 6.3(s) – Delridge North							
WS-14	Nucor Steel Mill 2424 SW Andover St	Eligible	X				
WS-188	Boysen Apartments 2906 SW Avalon	Eligible (Pending SHPO)			X		
WS-189	Shack Coffee Shop 2920 SW Avalon	Eligible (Pending SHPO)			X		
WS-190	Luna Park Café 2914 SW Avalon	Ineligible					
West Seattle Segment, Alternative 6.4 – Andover/Yancy Subsegment							
WS-14	Nucor Steel Mill 2424 SW Andover St	Eligible	X				
WS-25	Residence 2841 SW Yancy St	Ineligible					Lack of hist. sign., Alterations
WS-27	Residence 2851 SW Yancy St	Ineligible					Lack of hist. sign., Alterations
WS-33	Residence 3036 SW Avalon Way	Ineligible					Lack of hist. sign., Alterations
WS-37	Residence 3051 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-38	Residence 3055 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-45	Residence 3275 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-47	Residence 3279 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-191	Residence 2620 SW Dakota	Ineligible					
WA-192	Residence 4405 26 th Avenue SW	Ineligible					
West Seattle Segment, Alternative 6.5 – Genesee Subsegment							
WS-33	Residence 3036 SW Avalon Way	Ineligible					Lack of hist. sign., Alterations

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
WS-37	Residence 3051 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-38	Residence 3055 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-45	Residence 3275 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-47	Residence 3279 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-193	Residence 4317 26 th Street	Ineligible					Lack of hist. sign.
WS-194	Residence 4117 Delridge Way SW	Ineligible					Lack of hist. sign.
WS-195	Residence 4155 Delridge Way SW	Ineligible					Lack of hist. sign.
WS-196	Residence 4022 Delridge Way SW	Ineligible					Lack of hist. sign.
WS-197	Residence 4018 Delridge Way SW	Ineligible					Lack of hist. sign.
WS-187	Cooper Elementary School 4408 Delridge Way SW	Listed SL, NRHP Eligible (Pending SHPO)					
West Seattle Segment, Preferred Alternative							
WS-14	Nucor Steel Mill 2424 SW Andover St	Eligible	X				
WS-188	Boysen Apartments 2906 SW Avalon	Eligible (Pending SHPO)			X		
WS-189	Shack Coffee Shop 2920 SW Avalon	Eligible (Pending SHPO)			X		
WS-190	Luna Park Café 2914 SW Avalon	Ineligible					
WS-33	Residence 3036 SW Avalon Way	Ineligible					Lack of hist. sign., Alterations
WS-37	Residence 3051 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-38	Residence 3055 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-45	Residence 3275 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-47	Residence 3279 SW Avalon Way	Ineligible					Lack of hist. sign.
WS-76	West Seattle Nails 4201 SW Alaska St	Ineligible					Alterations
WS-77	Dentists Office 4729 42nd Ave SW	Ineligible					Lack of hist. sign., Alterations
WS-81	Cherry Creek Furniture 4554 California Ave. SW	SLE					Alternations
WS-82	Easy Street Records 4302 Alaska Street	SLE					Alternations

Inv. No.*	Resource/Address	NRHP Status	NRHP Criteria				Reason for Omission
			A	B	C	D	
WS-97	Curious Kidstuff 4740 California Ave SW	SLE					Alterations
WS-116	Apartment 5202 California Ave. SW	Eligible			X		
WS-117	Apartment 5206 California Ave. SW	Eligible			X		
WS-123	Affirmations 5405 California Ave SW	Ineligible					Lack of hist. sign., Alterations
WS-129	Residence 5440 California Ave SW	Ineligible					Lack of hist. sign.
WS-132	Residence 5458 California Ave SW	Ineligible					Lack of hist. sign.
WS-139	A Better Roofing 5643 California Ave SW	Ineligible					Lack of hist. sign.
WS-143	Farmers Insurance Group 5922 California Ave SW	Eligible			X		
WS-146	Residence 5927 California Ave SW	Ineligible					Lack of hist. sign.
WS-148	Residence 5933 California Ave SW	Eligible			X		
WS-151	Residence 5948 California Ave SW	Eligible			X		
WS-154	Residence 5956-5958 California Ave SW	Eligible			X		
WS-161	Residence 6021 California Ave SW	Ineligible			X		Lack of hist. Sign.
WS-171	Paint Your Wagon 6055 California Ave SW	Ineligible					Alterations

- SLE - Buildings that may eligible for Seattle City Landmark designation, but have not been reviewed by the Seattle Landmarks Board
- * - This building is not eligible by itself, but is eligible as part of a group of similar properties

IMPACTS ANALYSIS

Historic resources listed in or eligible for historic registers or as Seattle Landmarks if the properties were to be demolished were evaluated to determine potential effects of station and alignment alternatives on those resources. Analysis of potential effects to historic resources assessed the different actions that could occur during Green Line construction and operation. According to SEPA and NEPA, the following criteria are evaluated when interpreting short-term and long-term impacts that may cause adverse effects.

Demolition or Alteration of Property: The demolition or extensive alteration of all or part of the resource.

Isolation/Alteration of Surrounding Environment: Temporary or permanent restrictions of access to a historic resource or a change in the setting of the property's setting.

Traffic Congestion/Parking/Access: Congestion arising from changes in traffic patterns, parking, and access to historic resources.

Visual: The introduction of modern construction or the removal of historical resources adjacent to a historic property that are out of character with or alter the resource's historical setting.

Introduction of New Construction: The addition of new construction that is not compatible with the existing architecture of historic resources.

Structural Instability: Introduction of vibration during construction or operation that would cause damage to historic resources.

Noise: The introduction of audible elements that are out of character with the historic resource and its established use such that its use may be altered or abandoned.

Change of Use: The change in use of a historic resource brought about by construction or operation-related activities that make it no longer physically or financially feasible or desirable to maintain the current use.

Vibration: Construction or operation techniques that would create vibrations such that a resource may experience damages such as the loosening of paint or mortar, cracking of mortar or plaster, weakening of structural elements, or crumbling masonry.

Temporary Dirt/Unintended Damage: The introduction of atmospheric elements that may alter or damage a historic resource.

Neglect: Neglect of a resource resulting in its deterioration or demolition. This is a potential effect assessed under no-build alternatives.

In most cases, the alternatives examine alignment and station alternatives along the same streets, placing them at varying distances from the same sets of historic resources in each segment. The majority of adverse effects to historic resources from the Green Line involve visual effects created by the placement of a modern elevated monorail structure or station nearby. An adverse

effect to the resource would vary in magnitude depending on the proximity to the Green Line (for instance, by being across the street rather than directly in front of a resource), and the existing visual context. A limited number of resources could be demolished or substantially altered by the Green Line, causing an adverse effect, but in cases where this could be avoided (such as by choosing a different station alternative), the resource would still experience an adverse visual effect because the modern monorail structure would be introduced nearby.

Structural vibration effects from Green Line construction constitute potential effects to adjacent historic structures. The construction vibration threshold criteria for historic buildings was set at 100 VdB for fragile buildings and 95 VdB for extremely fragile buildings (which include historic brick buildings with a high risk of cracking and the Pioneer Square Areaways). More information regarding historic resources and construction vibration effect from pile driving, including individual building descriptions, distances to alignment, sensitivity ratings, and construction vibration effect are described in Table NN-3 and in the Vibration Section (4.7) of the *Green Line Environmental Impact Statement*. Most other criteria for evaluation of adverse effects for historic resources, such as loss of access, change of function, or neglect would not occur as long-term effects because the settings for the resources are in a highly urbanized area and along or near high use transportation corridors.

Some commenters expressed concern that Green Line trains would be located too close to building facades to allow for washing or restoration work. SMP has carefully studied this issue, and has designed all plans for alignment alternatives presented in this EIS such that they will not affect the maintenance, rehabilitation, or other work on the exteriors of historic buildings.

This issue is best understood through the concept of the “dynamic envelope.” That concept was discussed in the Draft EIS, and is further discussed in Chapter 3 of the Final EIS.

The train’s dynamic envelope is the furthest area in which the monorail train would ever be located even under worst-case conditions. For example, if a storm was blowing from the west, and, at the same time, all the train’s tires blew out on the east side of the train, and the entire suspension system failed on the east side of the train, the train would list to the east. However, because of the way monorail train systems are designed, the train would never, even under the conditions described above, exceed the dynamic envelope.

The minimum distance from monorail train dynamic envelopes to the side of the buildings would be 5 to 5.5 feet. The size of the dynamic envelope depends on the train height, but the closest an actual train would ever come to a building under normal operating conditions would be 6.5 to 8 feet, depending on the train technology used. This degree of proximity to a building would occur only in the 12-foot area where the monorail train would pass, not for the entire building height. Based on research conducted by train systems engineers, this distance from a building would not affect either the ability to wash windows, clean the façade, or conduct rehabilitation work.

Potential mitigation measures for both short-term and long-term effects are discussed in this section of this report. SMP will coordinate with the OAH, the City of Seattle, consulting parties, and the public to identify specific mitigation measures that will be addressed in a formal MOA. The MOA will be completed and included in the Record of Decision (ROD).

The following Preliminary Evaluation of Effect Table (Table NN-2) lists the historic resources within each alternative and indicates if construction of the monorail will have no effect, no

adverse effect, or an adverse effect on the resources. The table also identifies which resources would be affected by right-of-way acquisitions. For information regarding the type of adverse effects impacting historic resources, see Table NN-4.

Table NN-2
Preliminary Evaluation of Effect

Inv. No.*	Resource/Address	List Status	No Effect	No Adverse Effect	Adverse Effect	Right-of-Way Required
Ballard Segment, Alternative 1.1 - West Side of 15th						
B-60	Residence 7353 15th Avenue NW	Eligible			X	
B-114	Apartments 1505 NW 60th Street	Eligible			X	
B-131	Mike's Chili Parlor 1447 NW Ballard Way	Eligible			X	
B-132	Brekke Co. Steel Fabricators 1526 NW 46th Street	Eligible			X	
B-140	Ballard Bridge	NRHP			X	
Ballard Segment, Alternative 1.2 - Center of 15th						
B-60	Residence 7353 15th Avenue NW	Eligible			X	
B-114	Apartments 1505 NW 60th Street	Eligible			X	
B-131	Mike's Chili Parlor 1447 NW Ballard Way	Eligible			X	
B-140	Ballard Bridge	NRHP			X	
Ballard Segment, Preferred Alternative						
[Same as Alternative 1.1]						
Interbay/Magnolia Segment, Alternative 2.1- West Side of 15th/Center of Elliott						
I-25	Residence 3036 16th Ave. W.	Eligible			X	X
I-26	Residence 3032 16th Ave. W.	SLE			X	X
I-52	Tsubota Steel and Pipe 1641a 15th Ave. W.	Eligible			X	X ^a
I-66	Leibold Communications Inc. 1450 15th Ave. W.	Eligible		X		
I-72	Ace Tank 1123a Elliott Ave. W.	Eligible			X	
I-73	Ace Tank 1123b Elliott Ave. W.	Eligible			X	
I-74	Ace Tank 1123c Elliott Ave. W.	Eligible			X	
I-80	Wilson Machine Works 1038 Elliott Ave. W.	Eligible			X	
I-86	Phillips Scale Co. 934b Elliott Ave. W.	Eligible			X	
Interbay/Magnolia Segment, Alternative 2.1.1 - West Bridge Connection						
I-1C	Residence and Storage Fisherman's Terminal	Eligible			X	
Interbay/Magnolia Segment, Alternative 2.1.2 - Far West Bridge Connection						

Inv. No.*	Resource/Address	List Status	No Effect	No Adverse Effect	Adverse Effect	Right-of-Way Required
No eligible historic resources						
Interbay/Magnolia Segment, Alternative 2.2 - Center of 15th/West Side of Elliott						
I-1C	Residence and Storage Fisherman's Terminal	Eligible			X	
I-19	Residence 1414 Dravus St.	Eligible		X		
I-52	Tsubota Steel and Pipe 1641a 15th Ave. W.	Eligible			X	
I-66	Leibold Communications Inc. 1450 15th Ave. W.	Eligible		X		
I-72	Ace Tank 1123a Elliott Ave. W.	Eligible			X	
I-73	Ace Tank 1123b Elliott Ave. W.	Eligible			X	
I-74	Ace Tank 1123c Elliott Ave. W.	Eligible			X	
I-80	Wilson Machine Works 1038 Elliott Ave. W.	Eligible			X	
I-86	Phillips Scale Co. 934b Elliott Ave. W.	Eligible			X	
Interbay/Magnolia Segment, Preferred Alternative						
[Same as Alternative 2.1 with West Bridge Connection and demolition of I-52 under Howe 1A (Blaine) Station]						
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.1 - Seattle Center/Republican						
SC-7	7 Queen Anne Ave. N.	Eligible			X	
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible			X	X
SC-13	Queen Anne Apartments 505 1st Ave.	Eligible		X		
SC-15	Center House (Seattle Center) 305 Harrison St.	Eligible			X	
SC-16	Monorail Terminal, Office, and Track - Seattle Center	Eligible			X	X
SC-22	Memorial Stadium Center	Eligible, SLE			X	
SC-31	Space Needle	Eligible, Listed SL		X		
SC-32	Seattle Center Fountain	Eligible		X		
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.2 – Mercer						
SC-7	7 Queen Anne Ave. N.	Eligible			X	
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible MPN*			X	X
SC-13	Queen Anne Apartments 505 1st Ave.	Eligible		X		
SC-16	Monorail Terminal, Office, and Track - Seattle Center	Eligible			X	
SC-20	Auditorium Apartments 605 5th Ave. N.	Eligible			X	
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.3 – Thomas						
SC-7	7 Queen Anne Ave. N.	Eligible			X	

Inv. No.*	Resource/Address	List Status	No Effect	No Adverse Effect	Adverse Effect	Right-of-Way Required
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible MPN*			X	X
SC-15	Center House (Seattle Center) 305 Harrison St.	Eligible			X	
SC-16	Monorail Terminal, Office, and Track - Seattle Center	Eligible			X	X
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.5 - Second/Denny						
SC-7	7 Queen Anne Ave. N.	Eligible			X	
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible MPN*			X	X
SC-16	Monorail Terminal, Office, and Track - Seattle Center [REMOVE or not?]	Eligible			X	
Queen Anne/Seattle Center/Belltown Segment, Preferred Alternative						
SC-7	7 Queen Anne Ave. N.	Eligible			X	
SC-8	Dalmasso Apartments 26 W. Harrison St.	Eligible				X
SC-13	Queen Anne Ave. N.	Eligible		X		
SC-15	Center House (Seattle Center) 305 Harrison St.	Eligible			X	
SC-16	Monorail Terminal, Office, and Track - Seattle Center	Eligible				X
SC-22	Memorial Stadium	Eligible			X	
SC-31	Space Needle	Eligible		X		
SC-32	Seattle Center Fountain	Eligible		X		
Downtown/Pioneer Square Segment, Alternative 4.1 - West Side of Second						
D-2	Seattle, Chief of the Suquamish Statue 5th Ave., Denny Way, and Cedar St.	Listed NR, SL			X	
D-5	2619 5th Ave.	Eligible			X	
D-7	420 Vine St.	Eligible			X	
D-10	Fire Station No. 2 2318 4th Ave.	Eligible, Listed SL	X			
D-17	420 Blanchard St.	Eligible			X	
D-18	5th Avenue Court Apartments 2132 5th Ave.	Eligible			X	
D-26	Sheridan Apartments 2011 5th Ave.	Eligible			X	
D-27	Griffin Building 2005 5th Ave.	Potential SLE			X	
D-33	Centennial Building 1900-1910 4th Ave.	Eligible			X ^c	X ^b
D-34	Times Square Building 414 Olive Way	Listed NR, SL			X	
D-35	McGraw Square 5th Ave., Westlake Ave., Olive Way, Stewart St.	Listed SL			X	
D-36	Mayflower Park Hotel 1630 4th Ave.	Eligible			X	
D-37	Securities Building 1904 3rd Ave.	NRHP Eligible			X	

Inv. No.*	Resource/Address	List Status	No Effect	No Adverse Effect	Adverse Effect	Right-of-Way Required
D-38	Bon Marche 300 Stewart St.	Eligible			X	
D-40	Josephinum Hotel 1900 2nd Ave.	Listed NR			X	
D-42	Caffe D'Arte 125 Stewart St.	Eligible			X	
D-43	Inn at the Market 1601 1st Ave.	Listed NR PPHD		X		
D-46	Triangle Market 1532 Pike Pl.	Listed NR PPHD			X ^d	
D-47	First and Pine Building 1535 1st Ave.	Listed NR PPHD			X	
D-49	Doyle Building 1527 2nd Ave.	Listed NR			X	
D-50	Haight Building (2nd and Pike Building) 211 Pine St.	Eligible			X	
D-51	United Shopping Tower/ Olympic Tower 217 Pine St.	Listed NR, SL			X	
D-54	Corner Market Northwest Corner of 1st Ave. and Pike St.	Listed NR PPHD			X ^d	
D-57	Eitel Building 1511 2nd Ave.	Eligible			X ^d	X ^e
D-59	Economy Market Southwest Corner of 1st Ave. and Pike St.	Listed NR PPHD			X ^d	
D-64	Hadfield Building 1201 2nd Ave.	Eligible, Listed SL			X	
D-66	Baillargeon Building 1100 2nd Ave.	Eligible			X	
D-67	Federal Reserve Bank Building 1015 2nd Ave.	Eligible			X	X
D-68	Exchange Building 821 1st Ave.	Eligible, Listed SL			X	
D-69	Puget Sound Bank (Bank of California) 815 2nd Ave.	Eligible, Listed SL			X	
D-72	Seattle Trust and Savings Bank 804 2nd Ave.	Eligible			X	
D-73	Hong Kong and Shanghai Banking Corporation Clock 720 2nd Ave.	Eligible, Listed SL			X	
D-74	Foster and Marshall Building 720 2nd Ave.	Eligible			X	
D-75	Chamber of Commerce Building 215 Columbia St.	Eligible			X	
D-76	Metsker Maps 700 1st Ave.	Listed NR PSHD			X	
D-77	Hoge Building (Carson Boren Home Site) 705 2nd Ave.	Listed NR, SL			X	
D-78	Dexter Horton Building 710 2nd Ave.	Eligible, Listed SL			X	

Inv. No.*	Resource/Address	List Status	No Effect	No Adverse Effect	Adverse Effect	Right-of-Way Required
D-79	Mutual Life Building 605 1st Ave.	Listed NR PSHD			X	
D-80	Lowman Building 107 Cherry	Listed NR PSHD			X	
D-81	Seattle's Best Coffee 619 2nd Ave.	Listed NR PSHD			X	
D-82	Alaska Building 618 2nd Ave.	Listed NR PSHD			X	
D-85	Pioneer Building, Pergola and Totem Pole 606 1st Ave.	Listed NR PSHD			X	
D-86	Butler Garage 601 2nd Ave.	Listed NR PSHD			X	
D-87	610 2nd Ave.	Listed NR PSHD			X	
D-88	Hartford Building 600 2nd Ave.	Listed NR PSHD			X	
D-89	Lyon Building 601 3rd Ave.	Eligible			X	
D-90	Café Paloma 93 Yesler Way	Listed NR PSHD			X	
D-91	Tully's Coffee 99 Yesler Way	Listed NR PSHD			X	
D-92	Collins Building 520 2nd Ave.	Listed NR PSHD			X	
D-93	519 3rd Ave.	Listed NR PSHD			X	
D-94	512 2nd Ave.	Listed NR PSHD			X	
D-95	Smith Tower 502 2nd Ave.	Listed NR, SL PSHD			X	
D-96	Merchant's Café 109 Yesler Way	Listed NR PSHD			X	
D-97	Bohemian Nightclub 115 Yesler Way	Listed NR PSHD			X	
D-98	Flanagan and Lane 102 Yesler Way	Listed NR PSHD			X	
D-99	Metropole Market 423 2nd Ave. Ext. S.	Listed NR PSHD			X	
D-100	201 Yesler Way	Listed NR PSHD			X	
D-101	Frye Apartments 223 Yesler Way	Listed NR PSHD			X	
D-102	408 2nd Ave. Ext. S.	Listed NR (INT.) PSHD			X	
D-103	411 2nd Ave. Ext. S.	Listed NR (INT.) PSHD			X	
D-104	410 2nd Ave. Ext. S.	Listed NR (INT.) PSHD			X	
D-105	The Last Supper Club 124 S. Washington St.	Listed NR PSHD			X	
D-106	401 2nd Ave. Ext. S.	Listed NR (INT.) PSHD			X	
D-107	406 2nd Ave. Ext. S.	Listed NR PSHD			X	

Inv. No.*	Resource/Address	List Status	No Effect	No Adverse Effect	Adverse Effect	Right-of-Way Required
D-108	400 2nd Ave. Ext. S.	Listed NR PSHD			X	
D-109	165 S. Washington St.	Listed NR PSHD			X	
D-110	McCoys Firehouse 173 S. Washington St.	Listed NR (INT.) PSHD			X	
D-111	201 S. Washington St.	Listed NR PSHD			X	
D-112	Union Gospel Mission 211 S. Washington St.	Listed NR (INT.) PSHD			X	
D-113	Mathews and Chesnin Attorneys 219 S. Washington St.	Listed NR PSHD			X	
D-114	Union Gospel Mission 221 S. Washington St.	Listed NR PSHD			X	
D-115	313 2nd Ave. Ext. S.	Listed NR PSHD			X	
D-116	208 2nd Ave. Ext. S.	Listed NR PSHD			X	
D-117	Masins Fine Furniture 220 S. Main St.	Listed NR PSHD			X	
D-118	Comedy Underground 222 S. Main St.	Listed NR PSHD			X	
D-119	Seattle Fire Department Fire Prevention 220 3rd Ave.	Listed NR PSHD			X	
D-120	213 S. Main St.	Listed NR PSHD			X	
D-121	222 S. Main St.	Listed NR PSHD			X	
D-122	James Harris Gallery 307 2nd Ave. Ext. S.	Listed NR PSHD			X	
D-123	Seattle Lighting Fixture Co. 210 2nd Ave. Ext. S.	Listed NR (INT.) PSHD			X	
D-124	Vacant 208 S. Jackson St.	Listed NR PSHD			X	
D-125	Leathers/Gourmet Sausage Co. 315 S. Jackson St.	Listed NR PSHD			X	
D-126	King Street Station 301 S. Jackson St.	Listed NR PSHD			X	
D-127	Pioneer Square Areaways	Eligible		X		
D-127a	Sinking Ship Garage Areaway	NRHP Eligible		X		
D-127b	Butler Garage Areaway 601 Second Avenue	NRHP Eligible			X	
D-127c	Broderick Building Areaway 619 Second Avenue	NRHP Eligible			X	
D-128	Times Square Building Areaway	Eligible (Pending SHPO)		X		
D-129	Columbia Building Areaway	Eligible (Pending SHPO)		X		
D-131	Pike Place Public Market Historic District	NRHP Listed, SL			X	
D-132	Pioneer Square Historic District	NRHP Listed, SL			X	

Inv. No.*	Resource/Address	List Status	No Effect	No Adverse Effect	Adverse Effect	Right-of-Way Required
Downtown/Pioneer Square Segment, Alternative 4.2 - East Side of Second with Crossover						
[Same properties as Alternative 4.1 and avoiding demolition of D-33, D-57, and D-67. Demolition would occur to D-26 and D-27]						
Downtown/Pioneer Square Segment, Alternative 4.3 - Center of Second						
[Same properties as Alternative 4.1 and avoiding demolition of D-33.except no adverse effect for D-127b and D-127c. Resources D-57, and D-67 would still be demolished]						
Downtown/Pioneer Square Segment, Alternative 4.4 – East of Center Option						
[Same properties as Alternative 4.1 and avoiding demolition of D-33, D-57 and D-67. Resources D-26 and D-27 would be demolished]						
Downtown/Pioneer Square Segment, Preferred Alternative						
[Same properties as Alternative 4.1, but would avoid demolition of resource D-33 and D-57. Resource D-67 would be demolished]						
SODO/Chinatown International District/Pioneer Square Segment, Alternative 5.1 - East side of Third/Utah						
S-58	Markey Machinery Co. 79 S. Horton St.	Eligible			X	
S-61	Rainier Cold Storage Building A, SE corner of S. Horton St. and Colorado	Eligible			X	X
SODO/Chinatown International District/Pioneer Square Segment, Alternative 5.2 - West side of Third/Utah						
S-26	Bank of America 2764 First Avenue South	Eligible			X	
S-58	Markey Machinery Co. 79 S. Horton St.	Eligible			X	
S-61	Rainier Cold Storage Building A, SE corner of S. Horton St. and Colorado	Eligible			X	
SODO/Chinatown International District/Pioneer Square Segment, Preferred Alternative						
[same as Alternative 5.1]						
West Seattle Segment, Alternative 6.1 – West Seattle I						
WS-14	Nucor Steel Mill 2424 SW Andover St	Eligible			X	
WS-81	Cherry Creek Furniture 4545 California Ave. SW	SLE		X		
WS-97	Curious Kidstuff 4740 California Ave SW	SLE			X	
WS-116	Apartment 5202 California Ave. SW	Eligible			X	
WS-117	Apartment 5206 California Ave. SW	Eligible			X	
WS-129	Residence 5440 California Ave. SW	Eligible			X	
WS-143	Farmers Insurance Group 5922 California Ave SW	Eligible			X	
WS-148	Residence 5933 California Ave SW	Eligible			X	
WS-151	Residence 5948 California Ave SW	Eligible			X	

Inv. No.*	Resource/Address	List Status	No Effect	No Adverse Effect	Adverse Effect	Right-of-Way Required
WS-154	Residence 5956-5958 California Ave SW	Eligible			X	
West Seattle Segment, Alternative 6.2 - New Bridge						
WS-14	Nucor Steel Mill 2424 SW Andover St	Eligible			X	
WS-81	Cherry Creek Furniture 4554 California Ave SW	SLE			X	
WS-82	Easy Street Records 4302 Alaska St	SLE			X	
WS-116	Apartment 5202 California Ave. SW	Eligible			X	
WS-117	Apartment 5206 California Ave. SW	Eligible			X	
WS-129	Residence 5440 California Ave. SW	Eligible			X	
WS-143	Farmers Insurance Group 5922 California Ave SW	Eligible			X	
WS-148	Residence 5933 California Ave SW	Eligible			X	
WS-151	Residence 5948 California Ave SW	Eligible			X	
WS-154	Residence 5956-5958 California Ave SW	Eligible			X	
West Seattle Segment, Alternative 6.3 (s)-Delridge North						
WS-14	Nucor Steel Mill 2424 SW Andover Street	Eligible			X	
WS-188	Boysen Apartments 2906 SW Avalon Way	Eligible (Pending SHPO)			X	
WS-189	The Shack Coffee Shop 2920 SW Andover Street	Eligible (Pending SHPO)			X	
West Seattle Segment, Alternative 6.4 – Andover/Yancy Subsegment						
WS-14	Nucor Steel Mill 2424 SW Andover Street	Eligible			X	
West Seattle Segment, Alternative 6.5 – Genesee Subsegment						
WS-187	Cooper Elementary School 4408 Delridge Way	SL, NRHP Eligible (Pending SHPO)			X	
West Seattle Segment, Preferred Alternative						
[same as Alternative 6.1 with adverse visual effects to WS-188 and WS-189]						

- Shaded properties would be demolished
- SLE - Potentially eligible for Seattle City Landmark designation, but not yet reviewed by the Seattle Landmarks Board
- INT. - Intrusion into a Historic District (non-contributing property)
- This property is eligible for the NRHP as part of a Multiple Property Nomination
- ^a Demolition would occur with Howe 1A(Blaine) Station
- ^b Demolition would occur with Fifth/Stewart 1 (Northwest) station.
- ^c Visual adverse effect only would occur with Fifth/Stewart 2 (Virginia) station; demolition not required.
- ^d Visual effect would occur with Pike 1 (West), Option B.
- ^e Demolition would occur with Pike 1 (West), Option A.

LONG-TERM OPERATION IMPACTS

The following discussion provides a summary of potential effects for each Green Line alignment and station alternative. Tables NN-2 and NN-3 summarize potential effects to historic resources.

The long term operation effects discussion for each segment includes a summary of the historic resources adjacent to alignment and station alternatives and the level of potential effects associated with each resource (Visual Simulations are located in Appendix 4). The *Green Line Environmental Impact Statement* sections on Transportation (Section 4.1), Visual Quality (Section 4.5), and Vibration (Section 4.7) provide detailed information on adverse effects that could affect historic properties. There are no long-term operational vibration impacts that would create adverse effects to historic resources. For the Preferred Alternative, illustrations showing adverse effects, other than visual effects, have been included at the end of the long-term operation impacts discussion. Appendix 4 provides visual simulations that show the potential visual effects the Green Line would have on historic resources.

Ballard Segment

Alternative 1.1 – West Side of 15th

Four historic resources determined eligible for the NRHP and one historic resource (Ballard Bridge) listed in the NRHP are located along Alternative 1.1 or 1.1(s). Visual impacts from the elevated structure nearby would result in an adverse effect to a residence (B-60), apartments (B-114), Mike's Chili Parlor (B-131), and the Ballard Bridge (B-140). For the Ballard Bridge (B-140), the adverse effect also includes alteration of the surrounding environment by the introduction of a new bridge for the Green Line. Alternative 1.1 would have an adverse effect on Brekke Co. Steel Fabricators (B-132) due to the proximity of the Green Line. None of the station alternatives along this alignment would have an adverse effect on historic resources.

Alternative 1.2 – Center of 15th

Alternative 1.2 would have adverse visual effects on residence (B-60), apartments (B-114), Mike's Chili Parlor (B-131), and the Ballard Bridge (B-140). The adverse effect to Mike's Chili Parlor (B-131) would be greater than with Alternative 1.1 or 1.1(s) because the placement of the elevated structure to the west of the resource would be closer and would increase the change in character to the resource's setting. This would include increased isolation because affected properties would then be located between 15th Avenue NW's approach to the Ballard Bridge and the new Green Line guideway structure. Construction adjacent to the Ballard Bridge (B-140) would also result in an adverse effect due to isolation/alteration of the surrounding environment. As with Alternative 1.1/1.1(s), none of the station alternatives would have an adverse effect on historic resources.

Preferred Alternative

Within the Ballard Segment of the Preferred Alternative there are four buildings that are eligible for the NRHP and the Ballard Bridge, which is listed in the NRHP. Adverse visual effects would occur to the Brekke Co. Steel Fabricators (B-132), an apartment building (B-114), a residence (B-60), and Mike's Chili Parlor (B-131). Construction adjacent to the Ballard Bridge (B-140) would result in an adverse visual effect and isolation/alteration of the surrounding environment (Figure NN-11). None of the station alternatives along this alignment would have an effect on historic resources.

The Preferred Alternative would have the same adverse effects to five historic resources as alternative 1.1 or 1.1(s). Whereas Alternative 1.2 would have adverse effects on only four historic resources, the Preferred Alternative would have adverse effects on five resources.

Although Alternative 1.2 would have adverse effects on fewer resources than the Preferred Alternative, it would have greater adverse effects on Mike's Chili Parlor (B-131), causing isolation/alteration of surrounding environment. All alternatives would cause isolation/alteration of surrounding environment to the Ballard Bridge (B-140).

Interbay/Magnolia Segment

Alternative 2.1 – West Side of 15th /Center of Elliott

Two historic residences (I-25 and I-26) could experience adverse effects because Alternative 2.1/2.1(s) would pass over and potentially demolish all or part of the properties causing alteration of the property. If the West Bridge approach is selected (Alternative 2.1.1), there would be adverse visual effects and isolation/alteration of the surrounding environment on a storage building at Fishermen's Terminal (I-1C), while the Far West Bridge approach (Alternative 2.1.2) would avoid the effect. Six resources would be adversely affected by the visual changes related to the elevated guideway structure nearby, including Tsubota Steel and Pipe (I-52) (See Figure 2), the Ace Tank complex (I-72, I-73, I-74), Wilson Machine Works (I-80), and Phillips Scale Co. (I-86). The Green Line would be consistent with the industrial context and utilitarian architecture of the neighborhood. There would be no adverse effect on Leibold Communications Inc. (I-66).

Only one station alternative would have an effect on historic properties.

- **Howe 1 A (Blaine):** the false-front wood-frame Tsubota Steel and Pipe Building (I-52) would be demolished under this alternative.

Alternative 2.2 – Center of 15th /West Side of Elliott

Alternative 2.2 would avoid adverse effects to the two historic residences affected by Alternative 2.1. It would have adverse visual effects to the following six historic properties along 15th Avenue W and Elliott Avenue W, also discussed for Alternative 2.1: Tsubota Steel and Pipe (I-52), Ace Tank complex (I-72, I-73, I-74), Wilson Machine Works (I-80), and Phillips Scale Co. (I-86). In addition, one historic residence (I-19) and the Leibold Communication Inc. (I-66) are located within the APE for this alternative. There would be no adverse effect on a residence (I-19) and Leibold Communications Inc. (I-66).

Only one station alternative within this alignment alternative would have any effects:

- **Dravus 2 (15th):** A residence (I-19) would be affected through adverse visual effects from construction of the guideway nearby.

Operations Center C-1 Interbay

No historic resources would be affected by this alternative.

Preferred Alternative

Ten buildings within the Preferred Alternative APE have been determined eligible for the NRHP. Construction of this alternative would result in visual adverse effects to six buildings including the Tsubota Steel and Pipe Building (I-52), three Ace Tank buildings (I-72, I-73, and I-74), Wilson Machine Works (I-80), and Phillips Scale Co. (I-86). Under this alternative the guideway would pass over and potentially demolish all or part of residences (I-25 and I-26)

causing alteration of the property (Figures NN-12 and NN-13). The storage building at Fishermen's Terminal (I-1C) would be affected by both isolation/alteration of the surrounding environment and adverse visual effects (Figure NN-14). There would be no adverse effect to Leibold Communications Inc. (I-66).

Two station alternatives would have an effect on historic properties:

- **Howe 1 A (Blaine):** the false-front wood-frame Tsubota Steel and Pipe building (I-52) would be demolished under this alternative (Figure NN-15).
- **Dravus 1 B:** Under this alternative, the guideway would pass over and potentially demolish all or part of residences (I-25 and I-26) causing alteration of the property (Figure NN-12 and Figure NN-13).

The Preferred Alternative would have the same adverse effects to ten historic resources as Alternative 2.1, if the West Bridge Connection were used. If Alternative 2.1 used the Far West Bridge Connection, the alternative would avoid isolation/alteration of property to the Storage building at Fisherman's Terminal (I-1C) and would have adverse effects on only nine historic resources. The Preferred Alternative would have an adverse effect on ten historic resources, compared to the six historic resources that would be adversely affect by Alternative 2.2. The adverse effects of Alternative 2.2 would all be visual, while the Preferred Alternative would demolish/alter the property of three resources (I-25, I-26, and I-52), cause isolation of the environment to one resource (I-1C), and create visual adverse effects for five other resources (I-72, I-73, I-74, I-80, and I-86).

Queen Anne/Seattle Center/Belltown Segment

Alternative 3.1 – Seattle Center/Republican

Five significant historic resources would experience adverse effects with Alternative 3.1. The guideway approach to the Queen Anne 1 (North) station could require the Green Line guideway to pass over the Dalmasso Apartments (SC-8), resulting in an adverse effect due to alteration of property. The existing Seattle Center Monorail Terminal Office and Track (SC-16) would also be demolished, all or in part, including the track extending to Westlake Center. Options to retain a portion of the original monorail guideway through EMP (Alternative 3.1.2) would still involve an adverse effect to the resource because other portions would still be demolished. Introduction of the Green Line's elevated guideway in the immediate vicinity of historic resources would create visual effects that would have an adverse effect to 7 Queen Anne Avenue N (SC-7), Memorial Stadium (SC-22), and the Center House - Seattle Center (SC-15). This alternative would have no adverse effect on three resources: Queen Anne Apartments (SC-13), Space Needle (SC-31), and Seattle Center Fountain (SC-32). The following station alternatives would have an effect on historic properties:

- **Belltown Stations 1, 1A, and 2:** These three station alternatives would have adverse visual effects on 420 Blanchard Street (D-17) and the Fifth Avenue Court Apartments (D-18).

Alternative 3.2 – Mercer

Four resources eligible for listing in the NRHP would be adversely affected by Alternative 3.2. As with Alternative 3.1, the guideway approach to the Queen Anne 1 (North) station could require the Green Line to pass over the Dalmasso Apartments (SC-8) causing alteration of property, an adverse effect. The guideway to the station would also result in visual effects that would change the setting and cause adverse effects to 7 Queen Anne Avenue N (SC-7). The elevated structure turning from Mercer Street to Fifth Avenue N would adversely affect the Auditorium Apartments (SC-20) by creating visual effects that would alter its setting. With Alternative 3.2, there would be an option to retain the Fifth Avenue guideway of the existing Seattle Center Monorail Terminal Office and Track System (SC-16), or the Fifth Avenue guideway could be demolished; both options would involve adverse effects. The new Green Line directly beside the existing monorail would adversely affect its setting, although its function could potentially continue. The alignment would avoid Alternative 3.1's adverse visual effects to the Memorial Stadium (SC-22) and the Center House (SC-15), Space Needle (SC-31), and Seattle Center Fountain (SC-32). Alternative 3.2 would have no adverse effect on the Queen Anne Apartments (SC-13).

Under this alternative, the Seattle Center Queen Anne 1 and 1A (North) stations would have the same effects as listed under Alternative 3.1. This alternative also includes the Belltown 1(Center-West), 1A(Center-West) and 3(West) station alternatives that would have the same effect as the Belltown station options listed under Alternative 3.1.

Alternative 3.3 – Thomas

The Thomas Street alignment alternative would cause adverse effects to four significant historic resources, all of which are eligible for listing in the NRHP. With a station to the southwest of Key Arena (Seattle Center/Queen Anne 2), this alternative would avoid demolition of Dalmasso Apartments (SC-8), but an adverse visual effect would still result due to the guideway and station's close proximity to the apartments, as well as to 7 Queen Anne Avenue N (SC-7). The route through the Seattle Center would cross directly to the south of the Center House (SC-15), creating visual effects that would be considered adverse. It would also remove the existing Seattle Center Monorail (SC-16), as was described with Alternative 3.1, although the alignment itself might require removal of only that portion extending down Fifth Avenue. There would be no adverse effect on the Space Needle (SC-31) or the Seattle Center Fountain (SC-32). The Seattle Center/Fifth and Broad station alternative for this alignment would not result in additional adverse effects to historic resources. The Belltown station alternatives for this alignment would have adverse visual effects on 420 Blanchard Street (D-17) and the Fifth Avenue Court Apartments (D-18).

Alternative 3.5 – Second/Denny

Two of the same historic resources as the resources identified under Alternative 3.2 are located in the APE of Alternative 3.5 (Second/Denny): 7 Queen Anne Avenue N (SC-7) and the Dalmasso Apartments (SC-8). The construction of this alternative would adversely affect the Dalmasso Apartments (SC-8) and 7 Queen Anne Avenue N (SC-7) through visual effects and introduction of new construction, including the Seattle Center/Queen Anne 2 (South) station. The Seattle Center Monorail (SC-16) would be demolished under this alternative. The Belltown

station alternatives for this alignment would have adverse visual effects on 420 Blanchard Street (D-17) and the Fifth Avenue Court Apartments (D-18).

Preferred Alternative

The Preferred Alternative would have adverse effects on five resources that have been determined eligible for the NRHP. The alternative would have adverse visual effects on an apartment building (SC-7), the Seattle Center House (SC-15) and Memorial Stadium (SC-22). Construction of this alternative would result in the demolition of the Monorail Terminal, Office, and Track (SC-16) located in Seattle Center (Figure NN-16). The Green Line guideway would pass over the Dalmasso Apartments (SC-8) creating an adverse effect by altering the property (Figure NN-17). There would be an effect, but no adverse effect on the Queen Anne Apartments (SC-13) and the Space Needle (SC-31), and Seattle Center Fountain (SC-32). The following station alternatives would have an effect on historic properties:

- **Belltown 1A(Center-West):** This alternative would have adverse effects on 420 Blanchard Street (D-17) and the Fifth Avenue Court Apartments (D-18).

The Preferred Alternative would have the same adverse effects to five resources as Alternative 3.1. Alternatives 3.2 and 3.3 would each adversely affect four resources and Alternative 3.5 would have adverse effects on only three resources.

Downtown/Pioneer Square Segment

Alternative 4.1 – West Side of Second

Without appropriate mitigation, Alternative 4.1 would have adverse effects on up to 84 historic resources identified along this alignment. Up to five historic resources would be adversely effected by demolition/alteration of property, two buildings and the Pioneer Square Historic District would be adversely affected by isolation/alteration of the surrounding environment, no adverse effects would occur to four historic resources and the remaining resources would have adverse visual effects.

The historic resources that could be demolished under this alternative include the Centennial Building (D-33), Eitel Building (D-57), and Federal Reserve Bank Building (D-67). Without using avoidance as mitigation, the Broderick Building Areaway (D-127c) and the Butler Garage Areaway (D-127b) would be altered due to the placement of monorail footings along the exterior walls of the areaways. Isolation/alteration of the surrounding environment would affect the Pioneer Square Historic District (D-132), Doyle Building (D-49), and King Street Station (D-126).

This alternative would have no adverse effect on the Fire Station No. 2 (D-10) and three historic areaways including the Sinking Ship Garage Areaway (D-127a), Times Square Building Areaway (D-128), and Columbia Building Areaway (D-129).

Long-term visual effects caused by the introduction of a new modern element would adversely affect historic resources along this alignment. The visual effects would be related to the introduction of the elevated structure or stations, altering views of the buildings and/or substantially changing the character of their settings. In the cases where a different station siting option could potentially avoid the demolition of a historic resource, the resource would still be

adjacent to the guideway and would experience an adverse visual effect. Without considering design as mitigation, the Green Line columns and guideways may block views of significant architectural details such as cornices, moldings, pilasters, and window and door openings. Without considering design as mitigation, the Green Line columns and guideways would block some views of significant architectural details such as cornices, moldings, pilasters, and window and door openings. The height of the guideways would also block views of some of the decorative belt coursing located above the second story of some early twentieth-century historic buildings from some locations within the Downtown Segment. Visual simulations were prepared for many buildings in the Downtown Segment and are included Appendix 4.

King Street Station (D-126) is located on the southern edge of the Pioneer Square Historic District. North of King Street Station is the new King County Building, which currently contributes to the separation of the station from the rest of the Pioneer Square Historic District. The operation of the Monorail line north of King Street Station would further isolate this historic resource from the rest of the historic district. Although the operation of the Green Line, a linear rail transportation system, adjacent to the historic King Street Station is a modern intrusion in the Pioneer Square Historic District its use correlates closely with the area's historic railroad systems and will support the King Street Station's ongoing rail function.

The historic resources affected by Alternative 4.1 include the Pike Place Market and Pioneer Square historic districts and the following seven properties individually listed in the NRHP: Seattle, Chief of the Suquamish Tribe Statue (D-2), Times Square Building (D-34), Josephinum Hotel (D-40), Doyle Building (D-49), United Shopping Tower/Olympic (D-51), and Hoge Building (D-77). The Pioneer Building, Pergola and Totem Pole (D-85) are also listed as an ensemble in the NRHP and as a National Historic Landmark and would be affected by the change in visual context. Fifty historic resources are listed in the NRHP as part of the Pike Place Market and Pioneer Square historic districts. Twenty-five other affected resources have been determined eligible for listing in the NRHP (Table 4.11-2): 2619 Fifth Avenue (D-5), 420 Vine Street (D-7), 420 Blanchard Street (D-17), Fifth Avenue Court Apartments (D-18), Sheridan Apartments (D-26), Securities Building (D-37), Mayflower Park Hotel (D-36), Centennial Building (D-33), Bon Marche (D-38), Caffè D'Arte (D-42), Haight Building (D-50), Eitel Building (D-57), Hadfield Building (D-64), Baillargeon Building (D-66), Federal Reserve Bank Building (D-67), Exchange Building (D-68), Puget Sound Bank (D-69), Seattle Trust and Savings Bank (D-72), Hong Kong and Shanghai Banking Corporation Clock (D-73), Foster and Marshall Building (D-74), Chamber of Commerce Building (D-75), Dexter Horton Building (D-78), Lyon Building (D-89), Pioneer Square Areaways, Times Square Building Areaway (D-128), and Columbia Building Areaway (D-129). In addition, the Griffin Building (D-27) is eligible to be a Seattle City Landmark.

The effects of the station alternatives for Alternative 4.1 include:

- **Fifth and Stewart 1 (Northwest):** The Centennial Building (D-33) would be demolished, and nearby historic properties, including the Securities Building (D-37), Mayflower Park Hotel (D-36), Times Square Building (D-34), and the Bon Marche (D-38), would be adversely affected through visual effects and the change in setting related to the removal of the Centennial Building and the introduction of the new Green Line guideway and the station. The Times Square Building Areaway (D-128) would not be adversely affected by the construction of this station.

- **Fifth and Stewart 1A (West):** This alternative would have an adverse visual effect on the Sheridan Apartments (D-26), Griffin Building (D-27), and Times Square Building (D-34). The alternative would have no adverse effect on the Times Square Building Areaway (D-128).
- **Fifth and Stewart 2 (Virginia):** This alternative would avoid demolition of the Centennial Building. If this station alternative were selected instead of the Fifth and Stewart 1, the Green Line guideway along Stewart Street would cause adverse visual effects to the Centennial Building (D-33), the Securities Building (D-37), the Mayflower Park Hotel (D-36), and the Bon Marche (D-38).
- **Fifth and Stewart 2A (Virginia Center):** This alternative would have an adverse visual effect on the Sheridan Apartments (D-26) and the Griffin Building (D-27).
- **Pike 1 (West) A and B:** The station options differ primarily in the location of the station footprint. Pike 1 (West) A would demolish the Eitel Building; Pike 1 (West) B, the Preferred Alternative, would not. The station and adjacent guideways for both options would cause visual and change of setting effects to adjacent historic properties. Under Option A the Doyle Building (D-49), and Haight Building (D-50) would experience adverse visual effects. There would be an effect, but no adverse effect to the Columbia Building Areaway (D-129). Option B, while not demolishing the Eitel Building, would have adverse visual effects to the Pike Place Public Market Historic District (D-131), Doyle Building (D-49), Haight Building (D-50), Corner Market (D-54), Economy Market (D-59), and the First and Pine Building (D-47). The Doyle Building would also experience isolation/alteration to the surrounding environment.
- **Madison 1 (West):** The Federal Reserve Bank Building (D-67) property would be acquired and demolished with this station option. There would also be an adverse visual effect on the Baillargeon Building (D-66).
- **Yesler 1 (West):** This station option would have an adverse effect on the Smith Tower (D-95), which would be directly across Second Avenue. The construction of the Green Line station adjacent to the Smith Tower will introduce a modern structure to the Pioneer Square Historic District and obscure the view of the front elevation of the building. The station would be about the equivalent of a four-story building. However, the existing non-contributing parking garage, which already obscures this, would be demolished. Due to the demolition of that intrusive structure, there would be an offsetting positive effect on the surrounding buildings. The potential advantages to demolishing the Sinking Ship Garage would include other benefits to the neighborhood, including the creation of a more inviting public space, potential new physical and visual connections to Pioneer Square Park, as discussed in Section 4.5, Visual Quality and Aesthetic Resources, and potential development that is compatible with the Pioneer Square Historic District. There would be no adverse effect on the Sinking Ship Garage Areaway (D-127a).

Alternative 4.2 – East Side of Second with Crossover

Although Alternative 4.2 involves several different station options and would be on the opposite side of Second Avenue than Alternative 4.1 from Stewart Street to south of Marion Street, the overall number of resources adversely affected is similar, at 81. With the Fifth and Stewart 3 (Lenora) station, the alternative would avoid the demolition of the Centennial Building (D-33),

but would instead require demolition of the Sheridan Apartments (D-26) and Griffin Building (D-27). Similar to Alternative 4.1, the Broderick Building (D-127c) and the Butler Building Areaway (D-127b) would be altered due to the placement of monorail footings along the exterior walls of the areaways.

Compared to Alternative 4.1, the alignment of Alternative 4.2 on the east side of Second Avenue would lessen visual effects for historic buildings on the west side (such as the Exchange Building), while increasing the effects to resources on the east side, but in all cases, the presence of the Green Line structure on Second Avenue would still remain an adverse effect to the adjacent historic resources. Alternative 4.2 would cross over Second Avenue south at Marion Street to follow the west side of Second Avenue and use the Yesler 1 station. This would avoid placing the Green Line guideway or a station immediately beside the Smith Tower (D-95), although as with Alternative 4.1, an adverse visual effect would result. This alternative would also use the following additional stations.

- **Fifth and Stewart 3 (Lenora):** This alternative would have an adverse visual effect on the Sheridan Apartments (D-26) and the Griffin Building (D-27).
- **Pike 2 (East):** This alternative would have an adverse visual effect on the Eitel Building (D-57), Doyle Building (D-49), Haight Building (D-50) and no adverse effect on the Columbia Building Areaway (D-129).
- **Madison 2 (East):** This alternative would adverse visual effects on the Federal Reserve (D-67), Exchange Building (D-68), and Puget Sound Bank (D-69).

Alternative 4.3 – Center of Second

Except for the avoidance of demolition of historic properties for Alternative 4.1 stations, an alignment along the center of Second Avenue would adversely affect a similar number of historic resources, 79. The guideway in the center of Second Avenue could avoid placing a structure immediately in front of the historic buildings fronting Second Avenue, but it would more greatly restrict views down Second Avenue because the supporting structures for stations would extend from the sides to the middle of Second Avenue. The guideways would also be horizontally arranged, compared to the vertical arrangement that either Alternative 4.1 or 4.2 would use, which could have somewhat different impacts on street level views of upper floors of buildings and their architectural details. However, the introduction of the Green Line guideway and stations on Second Avenue would remain a substantial change to the setting for these historic resources, and visual effects, including partial obstruction of views of the buildings, would still occur and would be an adverse effect.

Alternative 4.3 station alternatives include Fifth and Stewart 2 (Virginia), which has effects as described in Alternative 4.1. The effects of the other stations include view blockage because the center mezzanine stations would be relatively large and would involve a greater intrusion into the street right-of-way. There would be greater adverse effects on views than with the stations associated with either Alternative 4.1 or 4.2:

- **Pike 3 (Center):** The presence of the station and adjacent guideway at this location would cause adverse visual effects for the Doyle Building (D-49), Haight Building (D-

50), and United Shopping Tower/Olympic Tower (D-51) and would require the demolition of the Eitel Building (D-57)

- **Madison 3 (Center):** This alternative would require the demolition of the Federal Reserve Building (D-67) and create adverse visual effects to the Baillargeon Building (D-66).
- **Yesler 2 (Center):** With a station over Second Avenue, this alternative would be more prominent than Yesler 1 (West), placing the station structure and supporting structures closer to Smith Tower. The introduction of the station and guideway on Second Avenue near Smith Tower and into the Pioneer Square Historic District would be an adverse visual effect. This alternative would have no adverse effect on the Sinking Ship Garage Areaway (D-127a).

Alternative 4.4 – East of Center Option

The impacts under this alternative would be similar to those under Alternative 4.2. This alternative would include the Fifth and Stewart 3 (Lenora) station discussed under Alternative 4.2 and the previously discussed Yesler 1 (West) station. Under this alternative the Columbia Building Areaway (D-129) would not be adversely affected.

The effects of the additional station alternatives for Alternative 4.4 include:

- **Pike A (East Center):** This station option will have adverse visual effects on the Eitel Building (D-57).
- **Madison 2A(East Center):** This alternative would have adverse visual effects on the Federal Reserve (D-67), Exchange Building (D-68), and Puget Sound Bank (D-69).

Preferred Alternative

This alternative would have adverse visual effects on 81 historically significant resources. The Pioneer Square Historic District, Doyle Building (D-49) and King Street Station (D-126) would be adversely affected due to the isolation/alteration from the surrounding environment (Figure NN-18, NN-19, and NN-20). The Federal Reserve Building (D-67) would be demolished (Figure NN-21) and the Broderick Building Areaway (D-127c) and the Butler Garage Areaway (D-127b) would be altered by the placement of a guideway footing on the areaways' exterior walls. Four resources would have no adverse effects, including Fire Station No. 2 (D-10), and three areaways (D-127a, D-128 and D-129). This alternative would use the previously discussed Fifth and Stewart 2A(Virginia Center), Pike 1 (West) B, Madison 1 (West), and Yesler (West) stations.

The Preferred Alternative (4.1) would have similar adverse effects as Alternatives 4.2, 4.3 and 4.4 with visual effects on more buildings. It would have adverse effects on the same number of historic resources as Alternative 4.1. The adverse effects under Alternative 4.1, however, include options to demolish two more buildings (D-33) avoiding destruction of property by passing down the center of Second Avenue. Alternative 4.3 would have the fewest number of demolitions.

SODO/Chinatown International District/Pioneer Square Segment

Alternative 5.1 – East Side of Third/Utah

Alternative 5.1 would involve visual effects, including the introduction of the Green Line structure near a historic resource determined eligible for listing in the NRHP. Markey Machinery Co. (S-58) on S. Horton Street would experience adverse visual effects from the placement of the Green Line structure in front of and above it. The Rainier Cold Storage Building A (S-61) would also experience an adverse visual effect. Because the building's setting would be in the Port of Seattle industrial area, would not be immediately adjacent to the new Green Line structures, and would be surrounded by port and transportation uses, the degree of change in setting it would experience would be lower than Markey Machinery Co. No historic resources are located within the APE of the station alternatives.

Alternative 5.2 – West Side of Third/Utah

Under this alignment alternative, three historic resources would experience adverse effects. Markey Machinery Co. (S-58) would experience adverse visual effects as described for Alternative 5.1, and a short portion of the route along First Avenue S would place the Green Line structure near the Bank of America (S-26). The effects would involve visual effects and change of setting related to the introduction of the Green Line structure near the resources. The moderate effect on Rainier Cold Storage Building A (S-61) would be as was described for Alternative 5.1. Station alternatives would not have adverse effects on historic resources.

Operations Center – C-2 – SODO

No historic resources are located in the APE of this Operations Center location.

Preferred Alternative

This alternative would have the same adverse effects as Alternative 5.1. The Markey Machinery Co. (S-58) and the Rainier Cold Storage Building A (S-61) would both have adverse visual effects due to construction of the guideway.

The Preferred Alternative would have the same adverse effect to historic resources as Alternative 5.1. This alternative would avoid the adverse effect to the Bank of America Building (S-26), which would occur under alternative 5.2.

West Seattle Segment

Alternative 6.1 – West Seattle I

Nine historic resources would experience adverse effects with Alternative 6.1. Curious Kidstuff (WS-97), a property previously identified as eligible for listing as a Seattle Landmark (City of Seattle, Historic Property Inventory, 2001), and three other properties determined eligible for listing in the NRHP, including Farmers Insurance Group (WS-143), two apartment buildings (WS-116 and WS-117) and four residences (WS-129, WS-148, WS-151 and WS-154), are along California Avenue SW and would experience adverse visual effects. This alternative would have no adverse effect on the Cherry Creek Furniture Building (WS-81), which would be located one block from the proposed guideway. Nucor Steel Mill (WS-14) would experience adverse visual

effects due to the introduction of the elevated Green Line structure departing from the West Seattle Bridge and passing to the east and substantially above the property to the Delridge 1 station, which would also be highly visible. Avalon 1 (Center), Alaska Junction 1 (42nd/Edmunds), Alaska Junction 1A, Morgan Junction 1 (West), and Morgan Junction 1A station options would not affect historic properties.

Alternative 6.2 – West Seattle II

Ten historic resources would experience adverse effects with Alternative 6.2. All adverse effects would be visual. The affected properties include three properties along California Avenue SW: Farmers Insurance Group (WS-143), two apartments (WS-116 and WS-117) and four residences (WS-129, WS-148, WS-151 and WS-154). With the route along Alaska Street, Easy Street Records (WS-82) and Cherry Creek Furniture (WS-81) would experience adverse visual effects due to the introduction of the Green Line structure. The Alternative 6.2 alignment would cross into the Nucor Steel Mill (WS-14) property and the Delridge 2 (Andover) station on the property. There would be an adverse visual effect to the Nucor Steel Mill due to the construction of the station on a portion of the property, but the access to and function of the mill is not expected to be affected. The stations at Delridge 2 (Andover), Avalon 2A (35th), Alaska Junction 2 (44th/California), and Morgan Junction 2 (Center) would not affect historic resources.

Alternative 6.3 – Delridge North Single Beam

Three historic properties would be affected by this alternative. The properties include the Nucor Steel Plant (WS-14), the Boysen Apartments (WS-188), and the Shack Coffee Shop (WS-189). These properties would all have adverse visual effects.

Only one station alternative would have an effect on historic properties:

- **Delridge 3 (Nucor):** Construction of a station at the Nucor Steel Plant (WS-14) would result in the isolation/alteration of this resource from the surrounding environment, which consists of freeway ramps, a fire station, and a scrap yard

Alternative 6.4 – Andover/Yancy

The Nucor Steel Plant (WS-14) would have adverse visual effects due to this alternative and isolation/alteration of the surrounding environment. No historic resources are located within the APE of this station alternative.

Alternative 6.5 -Genesee

The Cooper Elementary School (WS-187) would have adverse visual effects due to this alternative. No historic resources are located within the APE of this station alternative.

Preferred Alternative

Under this alternative the Nucor Steel Mill (WS-14), Farmers Insurance Group (WS-143), Curious Kid Stuff (WS-97), the Boysen Apartments (WS-188), the Shack Coffee Shop (WS-189) two apartments (WS-116 and WS-117) and four residences (WS-129, WS-148, WS-151, and WS-154) would have adverse visual effects. The Cherry Creek Furniture (WS-81) building is also within the APE for this alignment, but would have no adverse effects. No historic resources

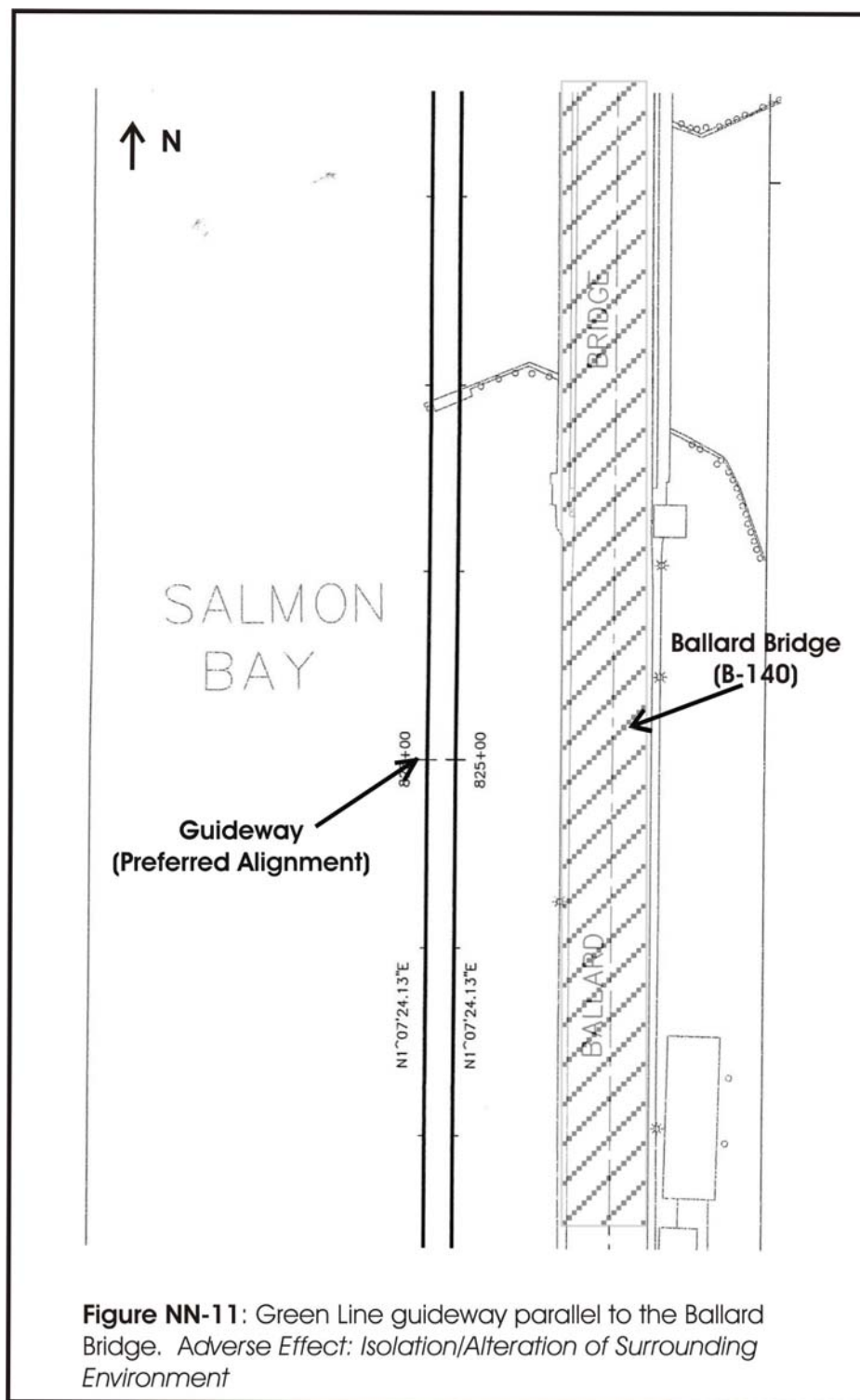
are located within the APE of this station alternative. Construction of the guideway directly adjacent to the north side of the Nucor Steel Mill property would result in isolation/alteration of the surrounding environment.

Construction of a station at the Nucor Steel Plant (WS-14) would also result in the isolation/alteration of this resource from the surrounding environment (Figure NN-24).

While Alternatives 6.1 and 6.2 would have adverse visual effects on nine resources, the Preferred Alternative would have adverse visual effects on eleven historic buildings or structures. This alternative would also create isolation/alteration of surrounding environment for the Nucor Steel Plant (WS-14).

No Action Alternative

Under the No Action Alternative, transportation improvements would be limited to those included in the future Seattle development projects, including transportation improvements and neighborhood redevelopment.



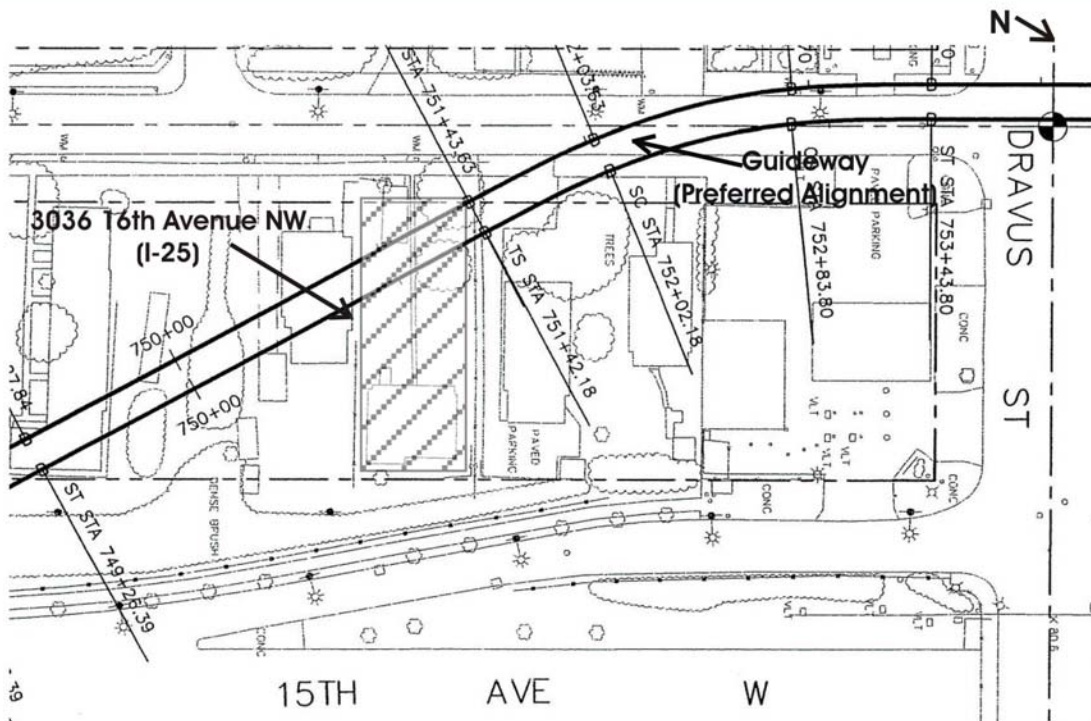


Figure NN-12: Green Line guideway passing over or demolishing a residence located on 16th Avenue NW. Adverse Effect: Isolation/Alteration of Surrounding Environment

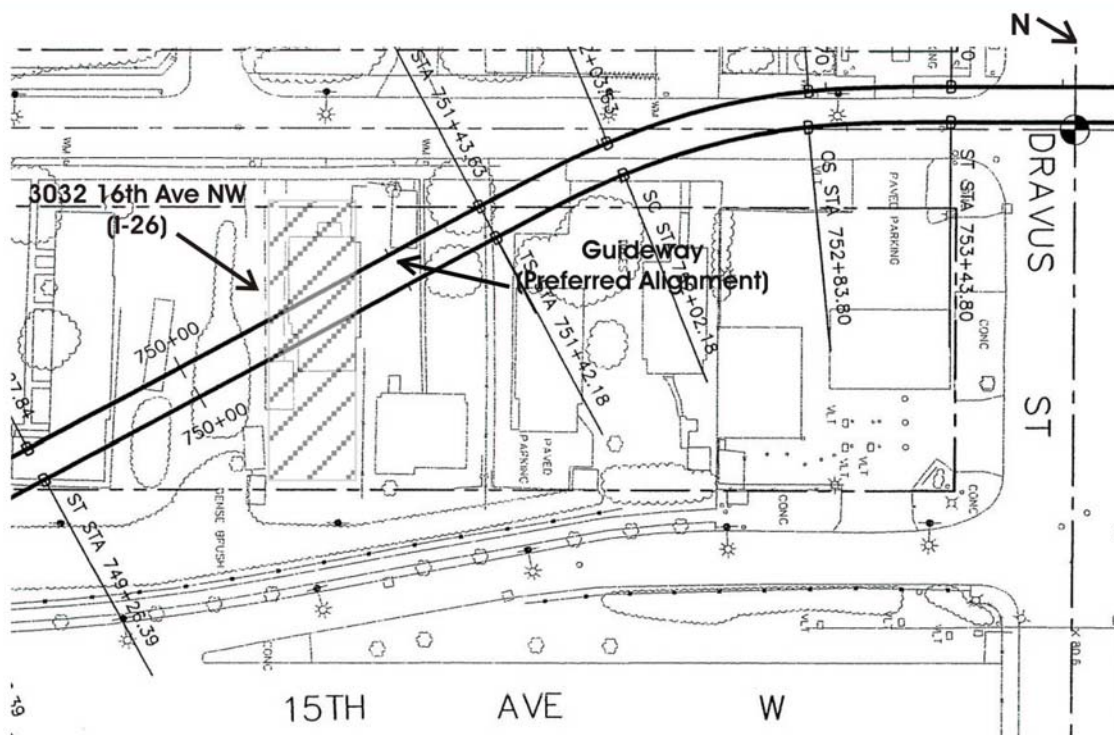


Figure NN-13: Green Line guideway passing over or demolishing a residence located on 16th Avenue W. Adverse Effect: Demolition/Alteration of Property

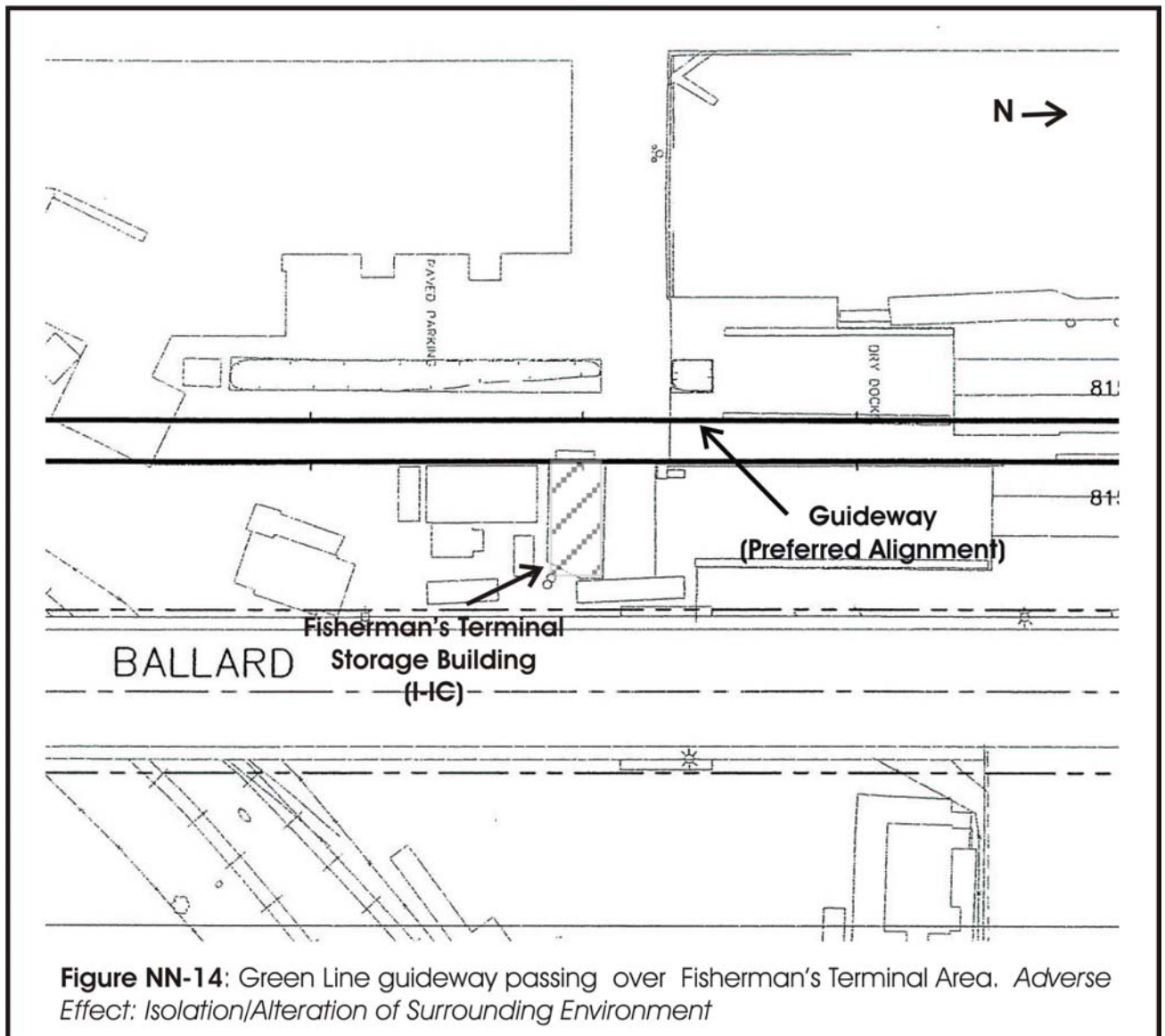
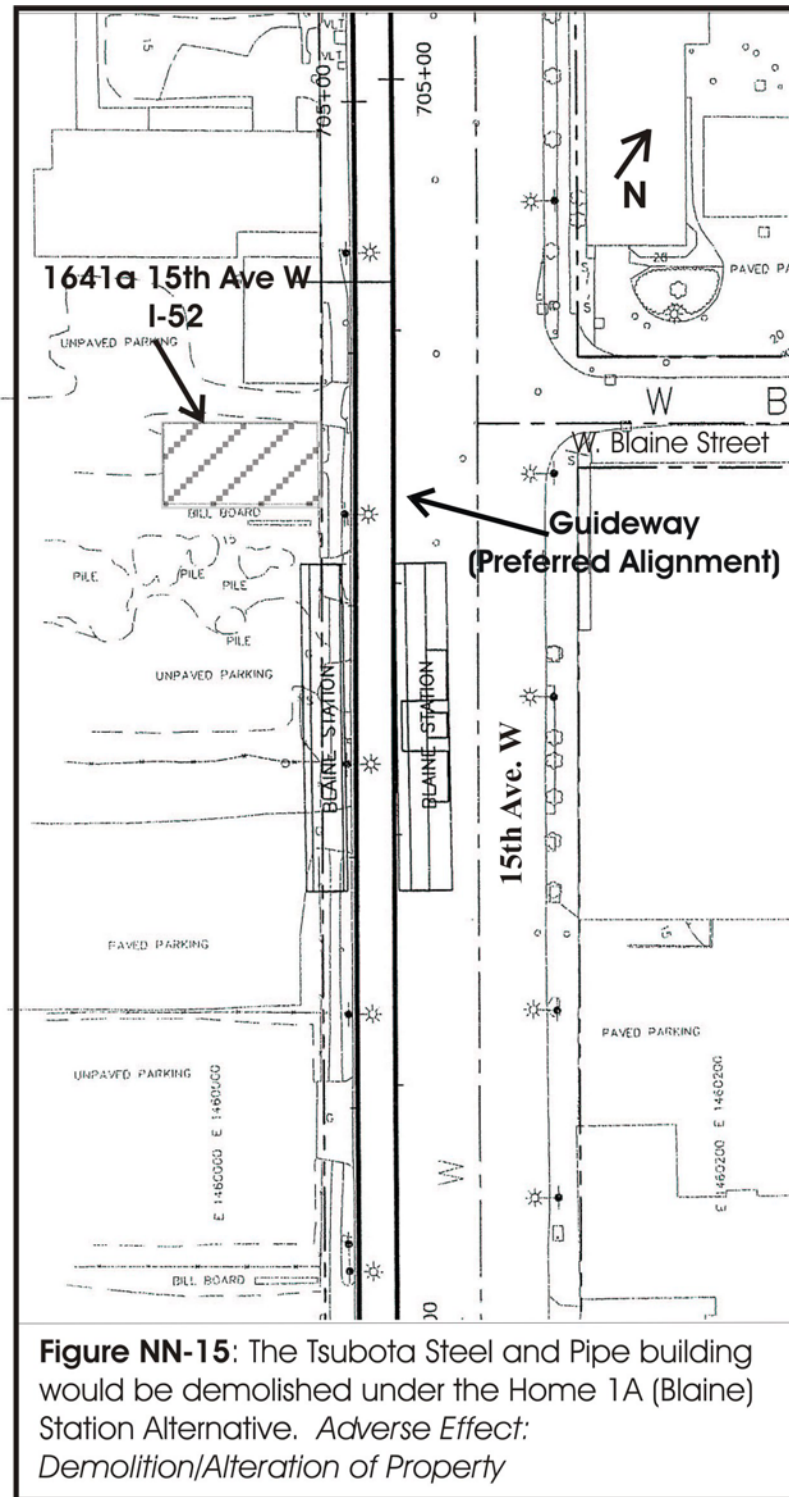
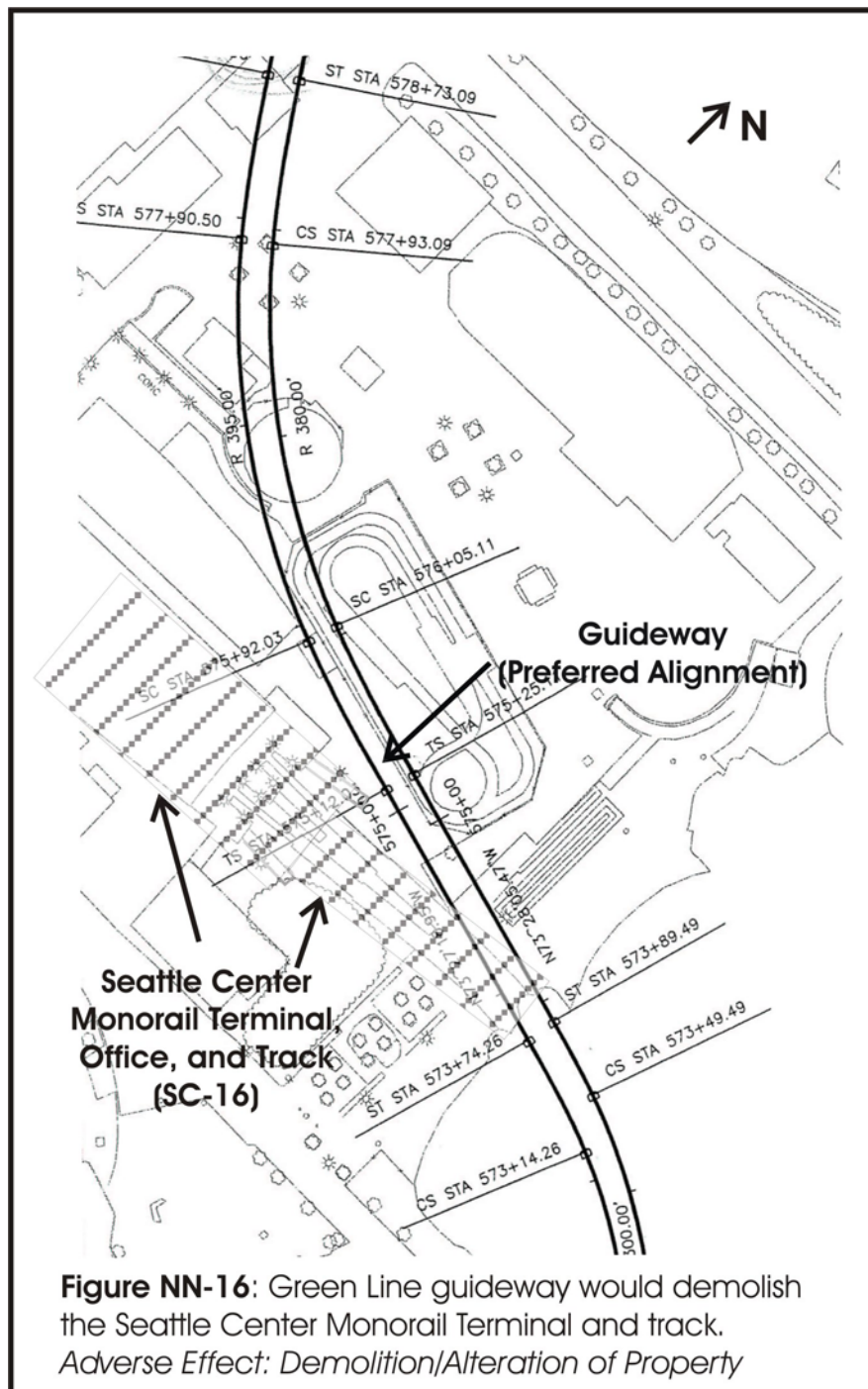


Figure NN-14: Green Line guideway passing over Fisherman's Terminal Area. Adverse Effect: Isolation/Alteration of Surrounding Environment





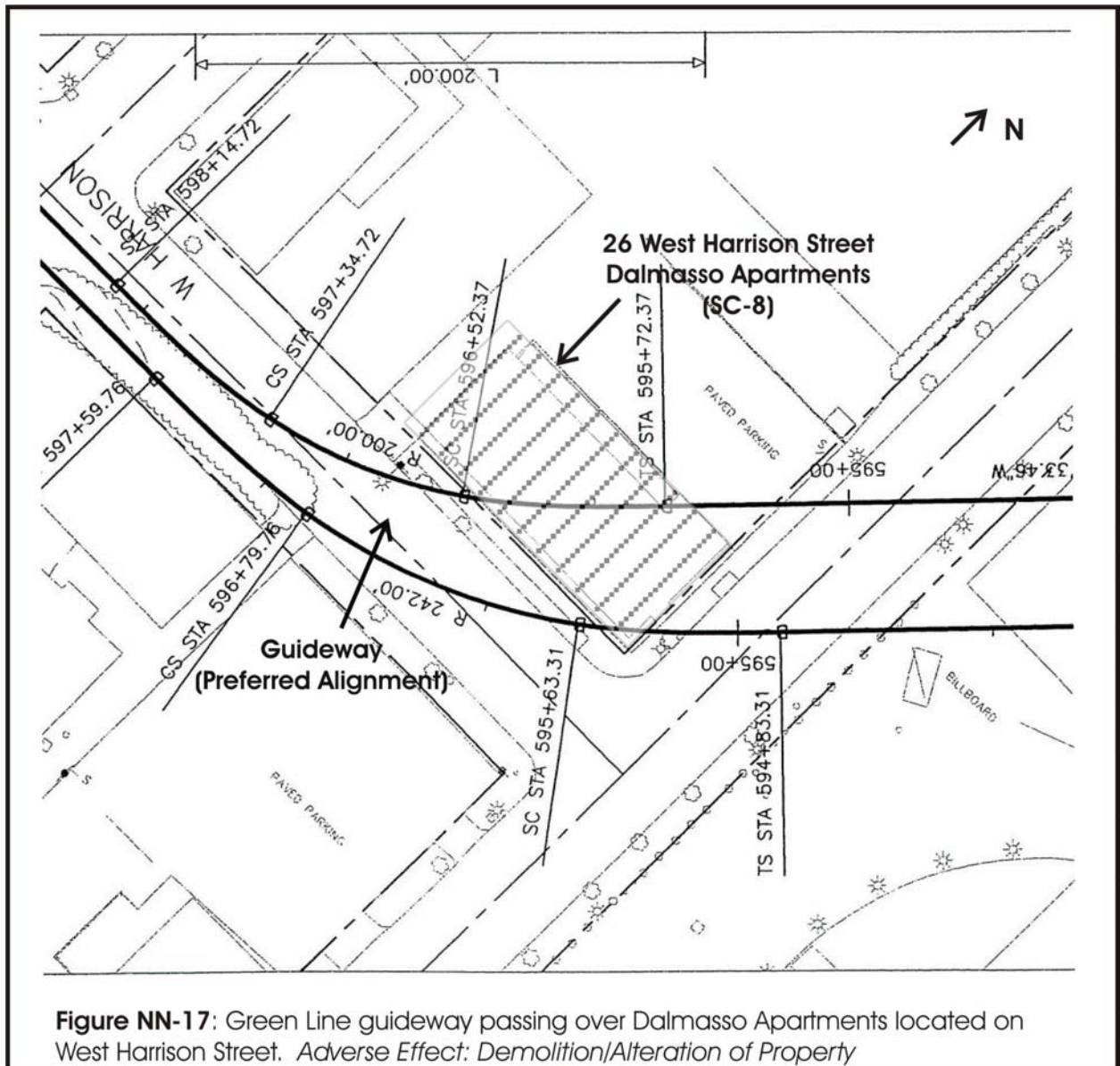
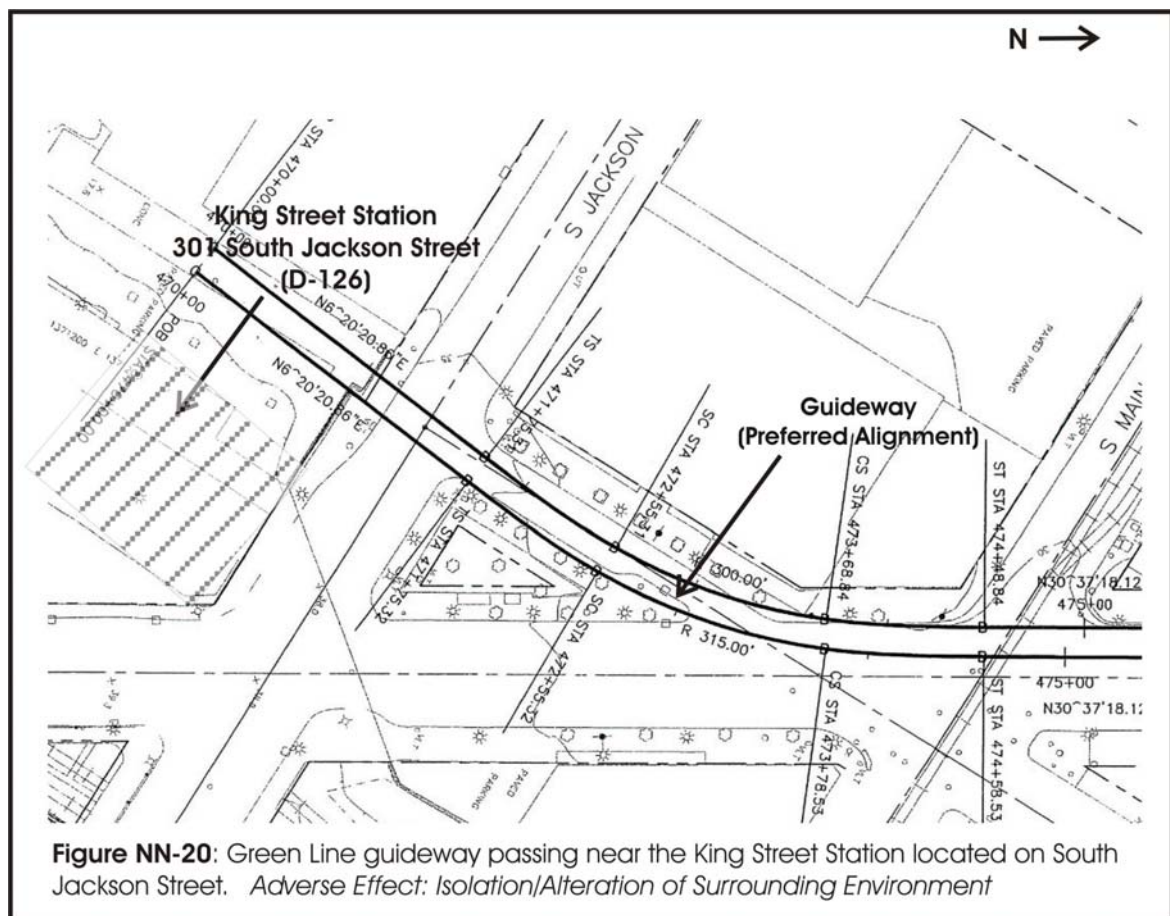
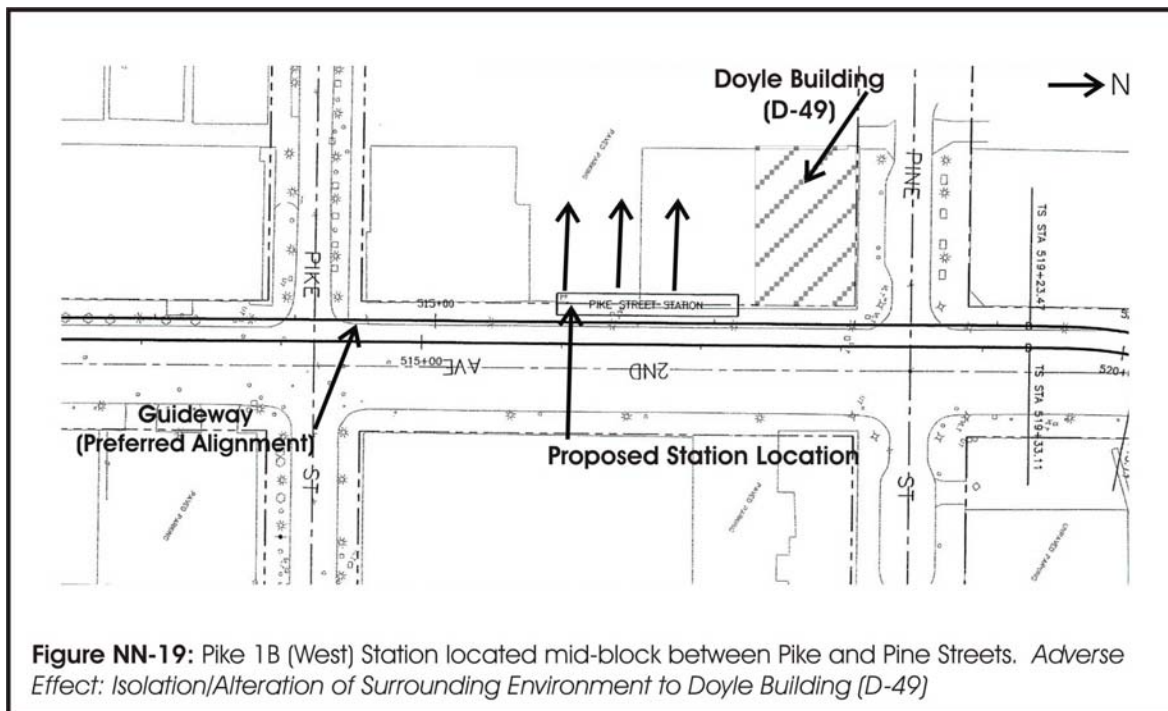
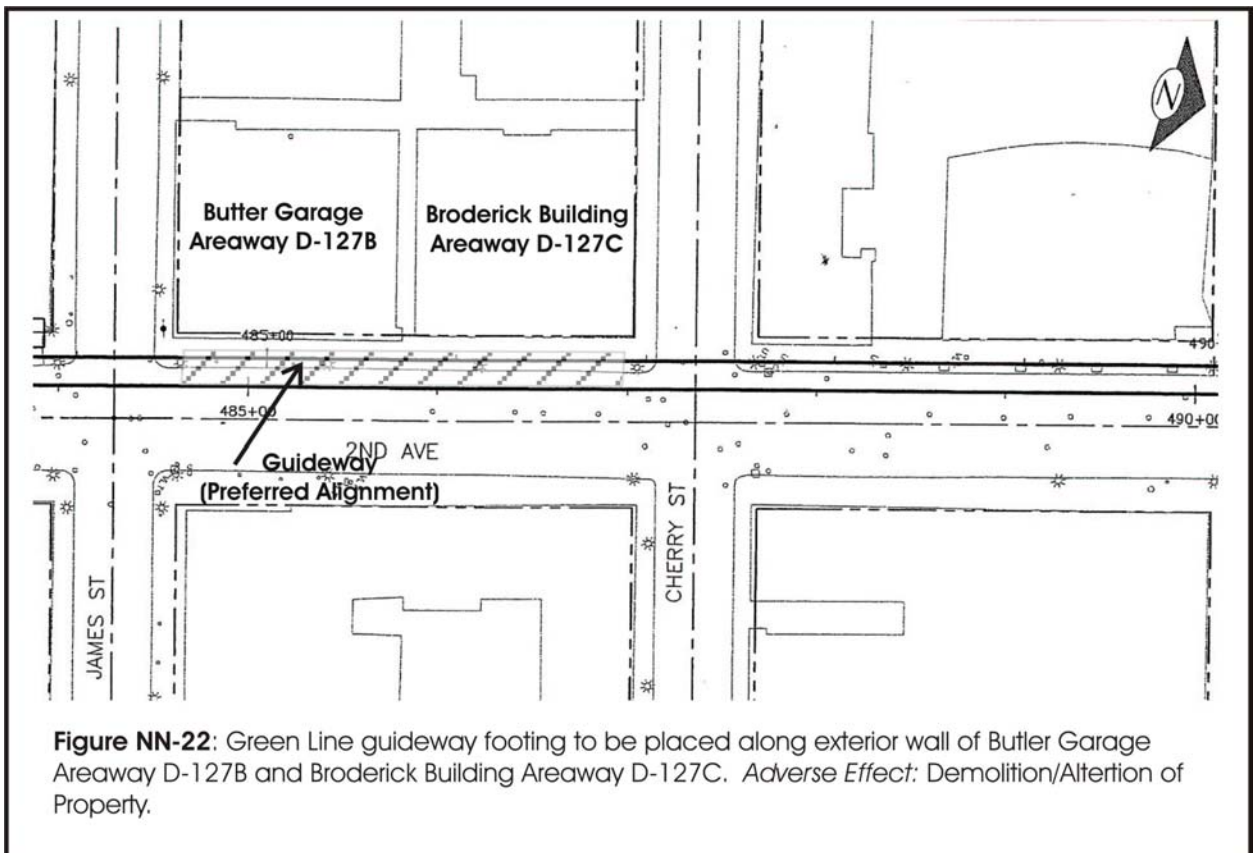
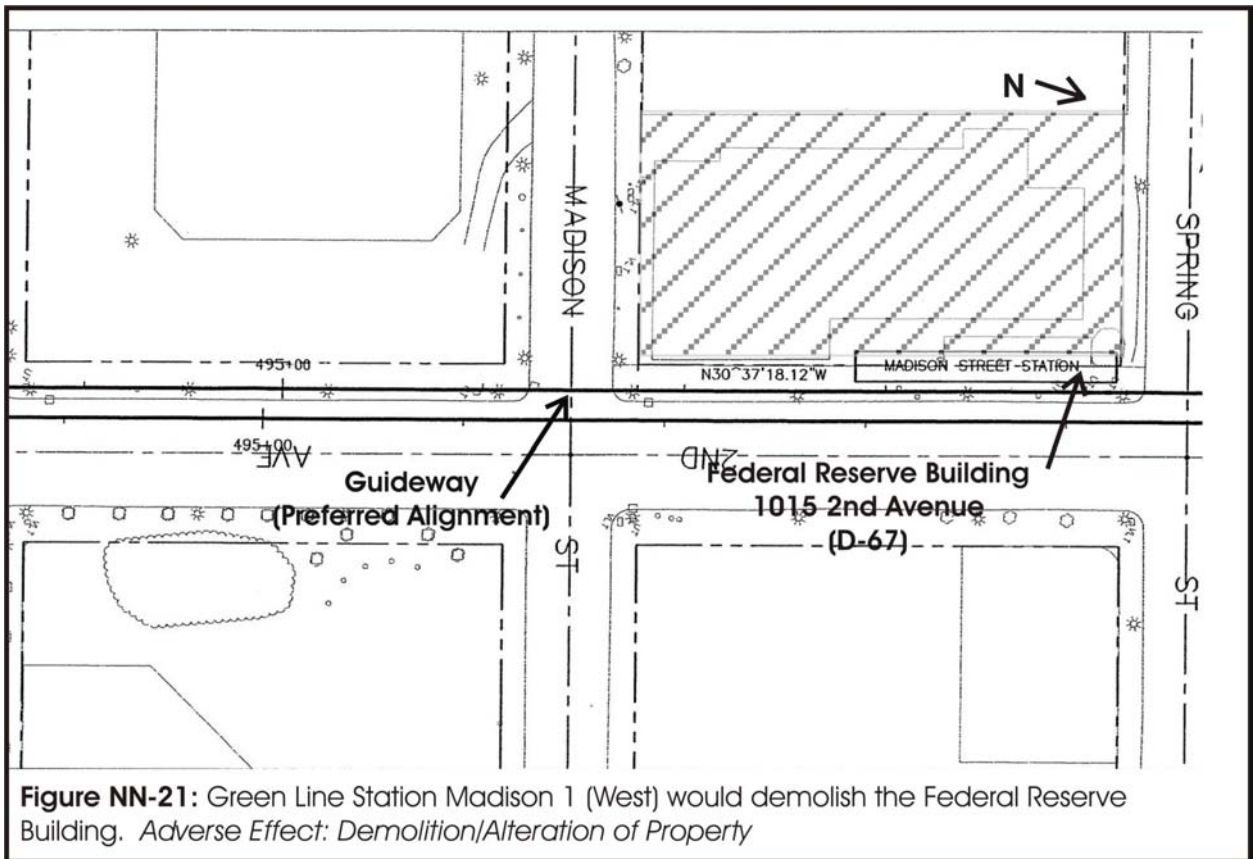
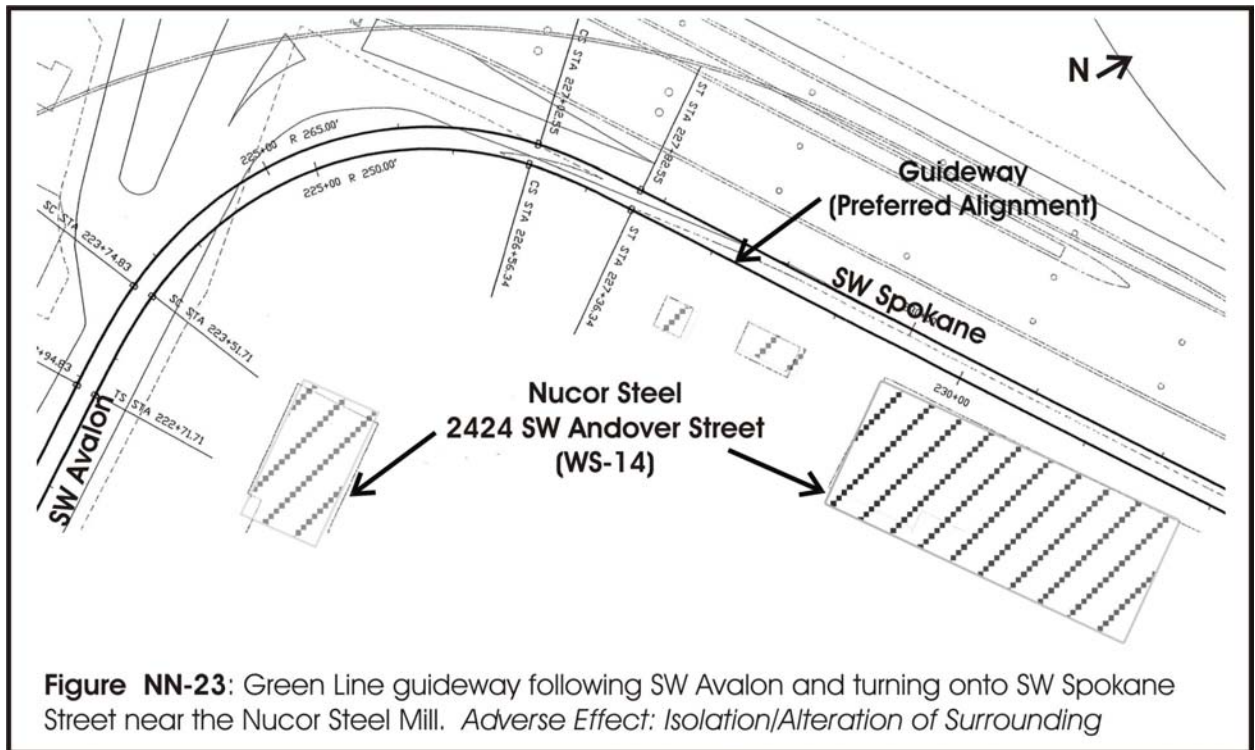




Figure NN-18 Visual simulation showing the Green Line within the Pioneer Square Historic District, along Second Avenue with a station in front of the Smith Tower. *Adverse Effect: Isolation/Alteration of setting.*







SHORT TERM/CONSTRUCTION IMPACTS

Historic resources within the APE of the alternatives and staging areas would experience adverse effects due the proximity of construction associated with the demolition, utility relocation, and construction of the support piers, bridges, guideways and stations for the monorail. The resulting effects would include temporary access restrictions, increased truck traffic in the vicinity, possible street closures and resulting traffic detours, increased noise and/or vibration related to the use of heavy equipment and pile driving, and dust. The demolition of historic resources is considered a long-term effect and is not repeated here. Otherwise, all of the resources identified as experiencing long term adverse effects and listed in Table NN-4 would also be likely to encounter some or all of the short-term effects listed above.

Of the potential short-term impacts, the greatest potential for effects to historic resources would involve vibration impacts that could damage historic structures. The construction vibration threshold criteria for historic buildings was set at 100 VdB for fragile (sensitive) buildings (including historic structures of pre-cast concrete, well-maintained wood, or steel) and 95 VdB for extremely fragile (very sensitive) buildings (including the historic areaways and structures of un-reinforced masonry, large concrete block, and load bearing timber structures). In contrast, the construction vibration threshold criteria for other types of buildings was set between 65-75 VdB. Pile driving is potentially the greatest source of vibration associated with equipment used during construction of the Green Line. Typically, buildings within 25 to 50 feet of the vibration-causing activity would have a higher potential to be affected, buildings within 50 to 100 feet would have a moderate potential, and buildings more than 100 feet away would have a lower potential. More information regarding historic resources and construction vibration effect from pile driving including individual building descriptions, distances to the alignment, sensitivity ratings, and construction vibration resulting in effects to historic buildings are described further in Table NN-3 and the Vibration Section 4.7 of the Green Line Environmental Impact Statement.

Table NN-3 Historic Resources and Construction Vibration Impact from Pile Driving
(Also included in the Vibration Section 4.7)

(This table has not been updated to include additional historic resources in West Seattle)

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
Ballard Segment					
B-114	Apartment Building 1505 NW 60 th Street	25 feet/Alternative 1.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 1.2	Low	Sensitive	Low/moderate
B-131	Mike's Chili Parlor 1447 NW Ballard Way	100 feet/Alternative 1.1.1	Low	Sensitive	Low/moderate
		385 feet/Alternative 1.1.1	Low	Sensitive	Low/moderate
		25 feet/Alternative 1.2	Low	Sensitive	Low/moderate
Interbay/Magnolia Segment					
I-74	Ace Tank 1123c Elliott Avenue W	50 feet/Alternative 2.1	Moderate/High	Sensitive	Low/moderate
		25 feet/Alternative 2.2	Moderate/High	Sensitive	Low/moderate
I-80	Wilson Machine Works 1038 Elliott Avenue W	50 feet/Alternative 2.1	Moderate/High	Very Sensitive	Moderate/high
		75 feet/Alternative 2.2	Moderate/High	Very Sensitive	Moderate/high
I-86	Phillips Scale Co. 934b Elliott Avenue W	50 feet/Alternative 2.1	Moderate/High	Very Sensitive	Moderate/high
		75 feet/Alternative 2.2	Moderate/High	Very Sensitive	Moderate/high
Queen Anne/Seattle Center/Belltown Segment					
SC-7	Historic Building 7 Queen Anne Ave. N	25 feet/Alternative 3.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 3.2	Low	Sensitive	Low/moderate
		25 feet/Alternative 3.3	Low	Sensitive	Low/moderate
		25 feet/Alternative 3.5	Low	Sensitive	Low/moderate
SC-15	Center House 305 Harrison St.	15 feet/Alternative 3.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 3.3	Low	Sensitive	Low/moderate
SC-20	Auditorium Apartments 605 Fifth Ave. N	20 feet/Alternative 3.2	Low	Sensitive	Low/moderate
Downtown/Pioneer Square Segment					
D-5	Historic Building 2019 Fifth Ave.	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-7	Historic Building 420 Vine St.	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
D-17	Historic Building 420 Blanchard St.	60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
D-18	Court Apartments 2132 Fifth Ave.	20 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high
		40 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		60 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
		15 feet/Alternative 4.1	Low	Sensitive	Low/moderate
D-34	Time Square Building 414 Olive Way	15 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alignment 4.3	Low	Sensitive	Low/moderate
		15 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.1	Low	Sensitive	Low/moderate
D-40	Josephinum Hotel 1900 Second Ave.	40 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
D-50	Historic Building 211 Pine St.	20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
D-68	Exchange Building 821 First Ave.	60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
D-69	Bank of California 815 Second Ave.	40 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
D-77	Carsen Boren Home 705 Second Ave.	40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-78	Dexter Horton 710 Second Ave.	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-81	Seattle's Best Coffee 619 Second Ave.	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-82	Alaska Building 618 Second Ave.	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-86	Butler Garage 601 Second Ave.	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-87	Historic Building 610 Second Ave	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-88	Hartford Building 600 Second Ave.	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-92	Collins Building 520 Second Ave.	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
D-94	Historic Building 512 Second Ave.	40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-95	Smith Tower 502 Second Ave.	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-99	Metropole Market 423 Second Ave. S	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-102	Historic Building 408 Second Ave. S	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-103	Historic Building 411 Second Ave. S	20 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high
		40 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
D-104	Historic Building 410 Second Ave. S	60 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
		60 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high
		40 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		60 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
D-106	Historic Building 401 Second Ave. S	20 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high
		40 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
D-107	Historic Building 406 Second Ave. S	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
D-108	Historic Building 400 Second Ave. S	40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-111	Historic Building 201 S Washington St.	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-112	Union Gospel Mission 211 S Washington St.	60 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
		60 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high
		40 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		60 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
D-113	Mathews and Chesnin Attorneys 219 S Washington St.	60 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
		60 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high
		40 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		60 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
D-115	Historic Building 313 Second Ave. S	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-116	Historic Building 208 Second Ave. S	60 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		60 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-118	Comedy Underground 222 S Main St.	20 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high
		40 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
D-120	Historic Building 213 S Main St.	20 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
D-125	Leathers/Gourmet Sausages Co. 315 S Jackson St.	40 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
		20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		40 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-126	King Street Station 301 S Jackson St.	30 feet/Alternative 4.1	Low	Very Sensitive	Moderate/high
		30 feet/Alternative 4.2	Low	Very Sensitive	Moderate/high
		30 feet/Alternative 4.3	Low	Very Sensitive	Moderate/high
		30 feet/Alternative 4.4	Low	Very Sensitive	Moderate/high
D-128	Area Way 414 Olive Way Underneath Times Square Building	15 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		15 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		15 feet/Alternative 4.4	Low	Sensitive	Low/moderate
D-129	Area way 1516 2nd Ave Underneath Columbia Bldg.	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate
407	Area Way Second and Cherry	10 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.4	Low	Sensitive	Low/moderate
406	Area Way Second and James	10 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.4	Low	Sensitive	Low/moderate
501	Area Way Second and Cherry	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
502	Area Way Second and Cherry	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate
503	Area Way Second and James	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate
601	Area Way Second and Yesler	10 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.4	Low	Sensitive	Low/moderate
701	Area Way Second and James	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate
702	Area Way Second and Yesler	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate
1003	Area Way Second and Yesler	10 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.4	Low	Sensitive	Low/moderate
1004	Area Way Second and Yesler	10 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.4	Low	Sensitive	Low/moderate
1005	Area Way Second and Yesler	10 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.4	Low	Sensitive	Low/moderate

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
1002	Area Way Second and Washington	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
1101	Area Way Second and Yesler	80 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.4	Low	Sensitive	Low/moderate
1102	Area Way Second and Washington	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate
1103	Area Way Second and Washington	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate
5001	Area Way Second and Washington	100 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		100 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		100 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		100 feet/Alternative 4.4	Low	Sensitive	Low/moderate
5003	Area Way Second and Main	80 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.4	Low	Sensitive	Low/moderate
1601	Area Way Second and Washington	80 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		80 feet/Alternative 4.4	Low	Sensitive	Low/moderate

Historic Building	Description/Address	Distance to Alignment	Potential for Pile Driving	Sensitivity ^{a,b}	Construction Vibration Impact
1602	Area Way Second and Washington	50 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		50 feet/Alternative 4.4	Low	Sensitive	Low/moderate
6001	Area Way Second and Main	10 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		10 feet/Alternative 4.4	Low	Sensitive	Low/moderate
6002	Area Way Second and S Jackson	20 feet/Alternative 4.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.2	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.3	Low	Sensitive	Low/moderate
		20 feet/Alternative 4.4	Low	Sensitive	Low/moderate
SODO/Chinatown International District/Pioneer Square Segment					
S-58	Markey Machinery Co. 79 S Horton Street	40 feet/Alternative 5.1	Moderate/High	Sensitive	Low/moderate
		60 feet/Alternative 5.2	Moderate	Sensitive	Low/moderate
S-61	Rainier S Horton Street and Colorado	60 feet/Alternative 5.1	Moderate	Sensitive	Low/moderate
		40 feet/Alternative 5.2	Moderate	Sensitive	Low/moderate
West Seattle Segment					
WS-82	Cherry Creek Furniture 4554 Alaska St.	40 feet/Alternative 6.2	Low	Very Sensitive	Moderate/high
WS-143	Farmers Insurance Group 5922 California Ave. SW	70 feet/Alternative 6.1	Low	Sensitive	Low/moderate
		40 feet/Alternative 6.2	Low	Sensitive	Low/moderate
WS-151	Residence 5948 California Ave. SW	70 feet/Alternative 6.1	Low	Sensitive	Low/moderate
		50 feet/Alternative 6.2	Low	Sensitive	Low/moderate
WS-154	Residence 5956-5958 California Ave. SW	40 feet/Alternative 6.1	Low	Sensitive	Low/moderate
		20 feet/Alternative 6.2	Low	Sensitive	Low/moderate
WS-188	Boysen Apartments 2906 SW Avalon Way	20 feet/Alternative 6.3	Low	Very Sensitive	Moderate/high

- ^a Sensitive Fragile Historic Buildings - Distance Factor Calculated using the 100 VdB re 1 micro inch/sec Vibration Damage Threshold Criterion, as per FTA Guidelines.
- ^b Very Sensitive Extremely Fragile Historic Buildings - Distance Factor Calculated using the 95 VdB re 1 micro inch/sec Vibration Damage Threshold Criterion, as per FTA Guidelines.

Alternative 1.1 – West Side of 15th

Four historic resources determined eligible for the NRHP and the NRHP-listed Ballard Bridge (B-140) would be affected during construction of Alternative 1.1 (Table NN-4 lists affected resources). Potential short-term impacts would affect all five resources through the introduction of new construction, temporary dirt damage, traffic/parking/access, congestion, noise/glare and visual effects. An apartment building (B-114) and Mike's Chili Parlor (B-131) would be sensitive to vibration during construction (see Vibration Section 4.7). Structural instability would not affect the residence (B-60), Brekke Co. Steel Fabricators (B-132), or the Ballard Bridge (B-140).

No historic resources are located within the APE of the station alternatives under Alternative 1.1.

Alternative 1.2 – Center of 15th

This alternative would include the same historic resources as Alternative 1.1, but would avoid the Brekke Co. Steel Fabricators (B-132). This alternative would cause the same potential short-term effects from construction to the resources discussed under Alternative 1.1. The effect caused to Mike's Chili Parlor under this alternative would also include vibration sensitivity due to construction of the Green Line guideway nearby. There are no historic resources located within the APE of the station alternatives under Alternative 1.2.

Ballard Preferred Alternative

The Preferred Alternative would have the same short-term adverse effects as Alternative 1.1. Under this alternative short-term impacts would affect a residence (B-60), apartments (B-114), Mike's Chili Parlor (B-131), the Ballard Bridge (B-140), and Brekke Co. Steel Fabricators (B-132) through the introduction of new construction, temporary dirt damage, traffic/parking/access, congestion, noise/glare and visual effects. An apartment building (B-114) and Mike's Chili Parlor (B-131) would also be sensitive to vibration during construction. Structural instability would not affect the residence (B-60), Brekke Co. Steel Fabricators (B-132), or the Ballard Bridge (B-140). None of the station alternatives along this route will affect historic resources.

Interbay/Magnolia Segment

Alternative 2.1 – West Side of 15th /Center of Elliott

Nine historic resources determined eligible for listing in the NRHP or as a Seattle City Landmark are located along Alternative 2.1 - West Side of 15th/Center of Elliott.

Two residences (I-25 and I-26) would be altered or demolished for construction of the alternative. The Liebold Communications Inc. (I-66) would be affected by temporary construction through visual effects, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare.

Five resources, including: Ace Tank complex (I-72, I-73, I-74), Wilson Machine Works (I-80), and Phillips Scale Co. (I-86) would be affected by temporary construction through visual effects, introduction of new construction, temporary dirt damage, traffic/parking/access, and noise/glare.

The Ace Tank complex (I-72, I-73, I-74) would be sensitive to vibration impacts and Wilson Machine Works (I-80) and Phillips Scale Co. (I-86) would be considered very sensitive to vibration impacts (see Vibration Section 4.7).

Under Alternative 2.1.1, the connection from the West Bridge, a Residence and Storage Building for the Fisherman's Terminal (I-1C) would be adversely affected by visual obstruction during construction. Only one station alternative would affect historic properties.

- **Howe 1A(Blaine):** Under Alternative 2.1, the Tsubota Steel and Pipe Building (I-52) would be demolished under the Howe 1A(Blaine) Station Alternative.

Operations Center C-1 Interbay

No historic resources would be affected by this alternative for the Operations Center.

Alternative 2.2 – Center of 15th /West Side of Elliott

Under Alternative 2.2 the Tsubota Steel and Pipe (I-52) and Phillips Scale Co. (I-86) would be affected by temporary construction through visual effects, introduction of new construction, dirt damage, traffic/parking/access, and vibration/noise/glare.

Ace Tank (I-72, I-73, I-74), Wilson Machine Works (I-80), a residence (I-19) and Liebold Communications Inc. (I-66) would be affected by temporary construction through visual effects, structural instability, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare. Only one station alternative within this alignment alternative would have effects to historic resources:

- **Dravus 2 (15th):** A residence (I-19) would be affected through visual effects, introduction of new construction, dirt damage, traffic/parking/access, and vibration/noise/glare.

Interbay/Magnolia Preferred Alternative

Ten buildings within the Interbay/Magnolia Preferred Alternative APE have been determined eligible for the NRHP. Construction of this alternative would result the introduction of new construction, temporary dirt damage, traffic/parking/access, congestion, noise/glare and visual effects to seven buildings including the Tsubota Steel and Pipe Building (I-52), Leibold Communications Inc. (I-66), three Ace Tank buildings (I-72, I-73, and I-74), Wilson Machine Works (I-80), and Phillips Scale Co. (I-86). A storage building at Fishermen's Terminal (I-1C) would also be affected by visual obstruction during construction.

Two station alternatives would have an effect on historic properties

- **Howe 1 A (Blaine):** Under this proposed future station location, the false-front wood-frame Tsubota Steel and Pipe building (I-52) would be demolished.
- **Dravus 1B:** the residences (I-25 and I-26) would be demolished under this alternative.

Queen Anne/Seattle Center/Belltown Segment

Alternative 3.1 – Seattle Center/Republican

Eight historic resources determined eligible for the NRHP are located along Alternative 3.1 – Seattle Center/Republican as described in the Long-Term Impacts Section (Table NN-4). Alternative 3.1 would have no construction-related effects on Queen Anne Apartments (SC-13), Space Needle (SC-31), and Seattle Center Fountain (SC-32).

Alternative 3.1 would affect three historic resources, 7 Queen Anne Avenue N (SC-7), Memorial Stadium (SC-22) and the Center House - Seattle Center (SC-15) by construction through visual effects, structural instability, introduction of new construction, temporary dirt damage, traffic/parking/access, and noise/glare. These historic resources also would be sensitive to vibration impacts during construction (see Vibration Section 4.7). The Green Line would pass over the Dalmasso Apartments (SC-8) and the existing Seattle Center Monorail Terminal Office and Track – Seattle Center (SC-16) would be demolished.

Station construction would result in the following effects:

- **Seattle Center/Queen Anne 1A (North):** The Dalmasso Apartments (SC-8) is located within the APE of the Seattle Center/Queen Anne 1 (North) station and would be affected by new construction, temporary dirt damage, traffic/parking/access, and vibration/noise/glare.
- **Belltown Stations 1, 1A, and 2:** The building at 420 Blanchard Street (D-17) and the Fifth Avenue Court Apartments (D-18) are located within the APE for these three stations and would be affected by new construction, temporary dirt damage, traffic/parking/access, and vibration/noise/glare.

Alternative 3.2 – Mercer

Six historic resources determined eligible for listing in the NRHP are located along Alternative 3.2 – Seattle Center/Republican (Table NN-4). This alternative would have no construction-related effects on 7 Queen Anne Apartments (SC-13), Space Needle (SC-31), and Seattle Center Fountain (SC-32).

The Green Line would pass over the Dalmasso Apartments (SC-8) altering the property and the Monorail Terminal, Office, and Track (SC-16) would require demolition. Construction would effect the 7 Queen Anne Avenue N (SC-7) and the Auditorium Apartments (SC-20) through structural instability, introduction of new construction, temporary dirt damage, traffic/parking/access, and noise/glare (Table NN-4). Construction impacts through vibration would effect the Auditorium Apartments (SC-20), and the 7 Queen Anne Avenue N (SC-7). Under this alternative, the Seattle Center Queen Anne 1 and 1A (North) stations would have the same effects as listed under Alternative 3.1. This alternative also includes the Belltown 1(Center-West), 1A(Center-West) and 3(West) station alternatives that would have the same effect as the Belltown station options listed under Alternative 3.1.

Alternative 3.3 – Thomas

This alternative would require the demolition of the existing Monorail Terminal, Office and Track (SC-16). It would also have construction-related effects on 7 Queen Anne Avenue N (SC-7), Dalmasso Apartments (SC-8), and the Center House (SC-15) through structural instability, introduction of new construction, temporary dirt damage, traffic/parking/access, and noise/glare. The same temporary construction effects would occur as noted in the Station Alternatives for Alternative 3.2.

Under Alternative 3.3, station alternatives Queen Anne 2 (South), Fifth and Broad 1 (Southeast), and Belltown 3 (West) would have the same temporary construction effects to historic resources as listed previously in Alternative 3.2.

Two station alternatives would have short-term effects to historic resources.

- **Queen Anne 2 (South):** One resource, 7 Queen Anne Avenue N (SC-7), located within the APE of the Queen Anne 2 (South) station, would be affected by operations through temporary visual effects, dirt damage, traffic/parking/access, and vibration/noise/glare.
- **Belltown 1 (Center-West):** The 420 Blanchard Street building (D-17) and the Fifth Avenue Court Apartments (D-18) are adjacent this proposed station and would be affected by new construction, temporary dirt damage, traffic/parking/access, and vibration/noise/glare.

Alternative 3.5 – Second/Denny

The construction of Alternative 3.5 – Second/Denny would demolish the Monorail Terminal, Office, and Track (SC-16). It would also affect 7 Queen Anne Avenue N. (SC-7) and the Dalmasso Apartments (SC-8) through temporary visual effects, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare (Table NN-4).

Two station alternatives within this alignment alternative would have any construction effects:

- **Queen Anne 2 (South):** One resource, 7 Queen Anne Avenue N (SC-7), located within the APE of the Queen Anne 2 (South) station, would be affected by operations through temporary visual effects, dirt damage, traffic/parking/access, and vibration/noise/glare.
- **Belltown 2 (Center-East):** The 420 Blanchard Street building (D-17) and the Fifth Avenue Court Apartments (D-18) are near this proposed station and would be affected by new construction, temporary dirt damage, traffic/parking/access, and vibration/noise/glare.

Queen Anne/Seattle Center/Belltown Preferred Alternative

Eight historic resources determined eligible for the NRHP are located along the Preferred Alternative for this segment as described in the Long-Term Impacts Section (Table NN-4). The Preferred Alternative would have no construction-related effects on Queen Anne Apartments (SC-13), Space Needle (SC-31), and Seattle Center Fountain (SC-32).

This alternative would affect four historic resources, 7 Queen Anne Avenue N (SC-7), Dalmasso Apartments (SC-8), Memorial Stadium (SC-22) and the Center House - Seattle Center (SC-15) by construction through visual effects, structural instability, introduction of new construction, temporary dirt damage, traffic/parking/access, and noise/glare. These historic resources also would be sensitive to vibration impacts during construction, although not adversely affected (see Vibration Section 4.7). The existing Seattle Center Monorail Terminal Office and Track – Seattle Center (SC-16) would be demolished. The Seattle Center/Queen Anne 1A (North) and Belltown 2 (Center-East) alternatives would have short-term effects to historic resources as described under Alternative 3.1 and 3.5.

Downtown/Pioneer Square Segment

Alternative 4.1 – West Side of Second

Under Alternative 4.1, West Side of Second, up to 84 historic resources, including the Pike Place Public Market Historic District and Pioneer Square Historic District, would be affected by temporary construction, including visual effects, dirt damage, traffic/parking/access, vibration/noise/glare, and the introduction of new construction.

The Seattle, Chief of Suquamish Statue (D-2) would be affected by temporary visual obstruction during construction. The Eitel Building (D-57) and Federal Reserve Bank Building would require demolition under this Alternative. Twenty-six sensitive historic resources and 10 very sensitive historic resources would be affected by vibration during construction (see Table NN-3 and Vibration Section 4.7). In addition, sensitive areaways (part of the Pioneer Square Areaways, D-127, Times Square Building D-128, and Columbia Building, D-129) would be affected by vibration during construction (see Table NN-3 and Vibration Section 4.7).

The construction of Station Alternatives Fifth and Stewart 1 (Northwest), Fifth and Stewart 2 (Virginia), Pike 1 (West) A, Pike 1 (West) B, Madison 1 (West), and Yesler 1 (West) would temporarily affect the historic resources listed below due to temporary visual effects, dirt damage, traffic/parking/access, and vibration/noise/glare. Station construction would cause the following effects:

- **Fifth and Stewart 1 (Northwest):** The Mayflower Park Hotel (D-36), Securities Building (D- 37), and Bon Marche (D-38), Times Square Building (D-34) are located within the expanded APE of the Fifth and Stewart 1 (Northwest) station. The Centennial Building (D-33), also within the APE, would be demolished.
- **Fifth and Stewart 1A (West):** The Sheridan Apartments (D-26), Griffin Building (D-27), and Times Square Building (D-34) are located within the expanded APE of the Fifth and Stewart 1 (Virginia Station) station.
- **Fifth and Stewart 2 (Virginia):** The historic resources within the APE for this station alternative include the Centennial Building (D-33), the Securities Buildings (D-37), the Mayflower Park Hotel (D-36), and the Bon Marche (D-38).
- **Fifth and Stewart 2A (Virginia Center):** This alternative includes the Sheridan Apartments (D-26) and the Griffin Building (D-27).

- **Pike 1 (West) A and B:** Resources within the Pike (West) 1A station alternative include the Doyle Building (D-49), Haight Building (D-50). Construction of the monorail would have no construction-related effect on the Columbia Building Areaway (D-129), which is also within the APE. Although the Eitel Building (D-57) is within the APE would be demolished. Resources within Pike (West) 1B include the Doyle Building (D-49), Haight Building (D-50), Eitel Building (D-57), Corner Market (D-54), Economy Market (D-59), First and Pine Building (D-47), and the modern Inn at the Market (D-43).
- **Madison 1 (West):** The Federal Reserve Bank Building (D-67) is located within the APE of this station, and would be demolished with this station alternative.
- **Yesler 1 (West):** Seattle's Best Coffee (D-81), Pioneer Building, Pergola and Totem Pole (D-85), Butler Garage (D-86), 610 Second Avenue (D-87), Hartford Building (D-88), Collins Building (D-92), 512 Second Avenue (D-94), Smith Tower (D-95), Bohemian Nightclub (D-97), Flanagan and Lane (D-98), Metropole Market (D-99), 201 Yesler Way (D-100), 408 Second Avenue Extension S (D-102), and 411 42nd Avenue Extension S (D-103) are all located within the 200-foot APE of Yesler 1 (West) station. This station alternative would include as construction-related effect to the Smith Tower (D-95), but less of a visual effect than the Yesler 1 (Center) station alternative because it is further away from the building. The crossover would avoid the Smith Tower (D-95), although there would still be a visual temporary construction-related effect to the building. There would be no construction-related effect on the Sinking Ship Garage Areaway (D-127a).

Alternative 4.2 – East Side of Second with Crossover

The same types of construction effects to historic resources would occur under Alternative 4.2 as in Alternative 4.1, with the exception of the Centennial Building (D-33), the Eitel Building (D-57), and Federal Building (D-67), which would not be demolished under this alternative. The Sheridan Apartments (D-26) and Griffin Building (D-27) would be demolished. Station construction would effect the historic resources listed below due to temporary visual effects, dirt damage, traffic/parking/access, and vibration/noise/glare.

Fifth and Stewart 3 (Lenora): The only historic resources located within the APE for this alternative are the Sheridan Apartments (D-26) and Griffin Building (D-27), which will be demolished. This station alternative avoids the demolition of the Centennial Building (D-33).

Pike 2 (East): The Doyle Building (D-49), Haight Building (D-50), United Shopping Tower/Olympic Tower (D-51), and Eitel Building (D-57) are located within the expanded APE of Pike 2 (East). The Eitel Building (D-57) would not be demolished with this station alternative.

Madison 2 (East): The Federal Reserve (D-67), Exchange Building (D-68) and Puget Sound Bank (D-69) are located within the APE of Madison 2 (East) station.

Yesler 1 (West): Alternative 4.2 crosses from the east to the west side of Second Avenue south of Marion Street. Therefore, the station at Yesler would be the same as for Alternative 4.1.

Alternative 4.3 – Center of Second

The same historic resources and same construction-related effects would occur under Alternative 4.3 as in Alternative 4.1, except the Centennial Building (D-33), Caffé D'Arte (D-42), and the Eitel Building (D-57) would not be demolished with this alternative.

Under Alignment 4.3, station alternatives Fifth and Stewart 3 (Lenora), Pike 3 (Center), Madison 3 (Center), and Yesler 2 (Center) affect the resources listed below through temporary visual effects, structural instability, dirt damage, traffic/parking/access, and vibration/noise/glare. Station construction would cause the following effects:

The Fifth and Stewart 2 (Virginia) and Fifth and Stewart 3 (Lenora) stations are included in this alternative. Short-term effects to historic resources under this alternative have been discussed above. The following additional station alternatives would have short term effects to historic resources under this alternative.

- **Pike 3 (Center):** The Doyle Building (D-49), Haight Building (D-50), United Shopping Tower/Olympic Tower (D-51), and Eitel Building (D-57) are located within the APE of Pike 3 (Center). The Eitel Building (D-57) would not be demolished with this station alternative.
- **Madison 3 (Center):** The Federal Reserve Bank Building (D-67) is located within the APE of Madison 3 (Center) station, but would not be demolished.
- **Yesler 2 (Center):** Under Alternative 4.3, the same resources are located within the APE of Yesler 2 (Center) station as Alternative 4.1, Yesler 1 (West) Station except Seattle's Best Coffee (D-81). The Lyon Building (D-89) is also located within the APE of Yesler 2 (Center) station.

Alternative 4.4 East of Center Option

The construction-related effects to historic resources under this alternative would be similar to those under Alternative 4.2. Like Alternative 4.2, the East of Second Alternative would require the demolition of the Sheridan Apartments (D-26) and the Seattle Landmark-eligible Griffin Building (D-27). This alternative would also require the demolition of the Federal Reserve Building (D-67). The construction-related effects caused by the Madison 2A (East Center) station alternative would be the same as Madison 2 (East) under Alternative 4.2. Below is a summary of construction-related effects caused by the Pike 1A (East Center) station alternative, which is specific to Alternative 4.4.

- **Pike 1A (East Center):** This station option will have adverse effects through temporary visual effects, structural instability, dirt damage, traffic/parking/access, and vibration/noise/glare. The Doyle Building (D-49), Eitel Building (D-57), Triangle Market (D-46), First and Pine Building (D-47), Haight Building (D-50), Corner Market (D-54), and Economy Market (D-59).

Downtown/Pioneer Square Preferred Alternative

Similar to Alternative 4.1, under this alternative 84 historic resources would be affected by temporary construction, including visual effects, dirt damage, traffic/parking/access, vibration/noise/glare, and the introduction of new construction and the Federal Building (D-67) would be demolished. Because the Preferred Alternative includes station option Pike 1B, which requires extending the guideway from Second Avenue to First Avenue on the block between Pike and Pine streets, this alternative would have less construction-related effects on four properties (D-43, D-47, D-54, and D-59) that could be avoided under Alternative 4.1 by using the Pike 1 A Station option. No construction-related effects would occur to the Pioneer Square Areaways (D-127), Times Square Building Areaway (D-128), or the Columbia Building Areaway (D-129), which are located within the APE.

SODO/Chinatown International District/Pioneer Square Segment

Alternative 5.1 – East Side of Third/Utah

Two historic resources that were determined eligible for the NRHP are located along Alternative 5.1 - East side of Third/Utah: the Markey Machinery Co. (S-58) and Rainier Cold Storage Building A (S-61). This alternative would have an effect on both the Markey Machinery Co. and the Rainier Cold Storage Building A (S-61) by temporary construction effects including: visual effects, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare. Both historic resources are considered sensitive and would also be affected by vibration during construction (see Table NN-3 and Vibration Section 4.7). The Rainier Cold Storage Building A (S-61) would also potentially be effected by structural instability during construction.

Under Alternative 5.1, Station Alternatives Weller/King Street 1 (standard), Safeco Field 1, Lander 1 (Northeast), Lander 2 (Southwest), and Lander 4 (Utah) would have no adverse effect on historic resources.

No historic resources would be affected by construction of the SODO alternative Operations Center.

Alternative 5.2 – West Side of Third/Utah

In addition to the two historic resources listed under Alternative 5.1, a third resource, Bank of America (S-26) is located along Alternative 5.2 and is eligible for the NRHP. Under this alternative, there would be no construction-related effects on Rainier Cold Storage Building A (S-61) (Table NN-4). Construction effects would affect the Markey Building (S-58) and Bank of America (S-26) by temporary structural instability, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare.

No historic resources are located within the APE of the Weller/King Street (Event) and Lander 3 (Diagonal) Stations.

SODO Preferred Alternative

The SODO segment Preferred Alternative would have the same short-term construction effects as listed Alternative 5.1. The Markey Machinery Co. (S-58) and Rainier Cold Storage Building

A (S-61) are located within the APE for this alternative. The alternative would cause temporary construction effects including: visual effects, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare on both the Markey Machinery Co. (S-58) and the Rainier Cold Storage Building A (S-61) by. Both historic resources are considered sensitive and would also be affected by vibration during construction (see Table NN-3 and Vibration Section 4.7). The Rainier Cold Storage Building A (S-61) would also potentially be effected by structural instability during construction. No stations included within this alternative would have adverse effects on historic resources.

West Seattle Segment

Alternative 6.1 – West Seattle I

Ten historic resources that were determined eligible for the NRHP are located along Alternative 6.1 – West Seattle Bridge: Nucor Steel Mill (WS-14), Farmers Insurance Group (WS-143), two apartments (WS-116 and WS-117) and four residences (WS-129, WS-148, WS-151, and WS-154). Two additional resources, Curious Kidstuff (WS-97) and Cherry Creek Furniture (D-81) were determined Seattle Landmark-eligible. This alternative would have not construction-related effects on Cherry Creek Furniture (WS-81). Four resources, Curious Kidstuff (WS-97), Farmers Insurance Group (WS-143), two apartments (WS-116 and WS-117) and two residences (WS-151 and WS-154) would be temporarily affected by construction through structural instability, introduction of new construction, temporary dirt damage, traffic/parking/access, and noise/glare (Tables 3). Curious Kidstuff (WS-97), Farmers Insurance Group (WS-143), two apartments (WS-116 and WS-117) and a residence (WS-154) would also be affected by construction through structural instability and vibration impacts (see Table NN-3 and Vibration Section 4.7).

Curious Kidstuff (WS-97) is the only resource located within the APE of a Station Alternative, Alaska Junction 1 (42nd/Edmunds). It would be affected by construction through temporary dirt damage, traffic/parking/access, and vibration/noise/glare.

Alternative 6.2 – West Seattle II

This alternative includes the same resources as Alternative 6.1 and Easy Street Records (WS-82). This alternative would have the same short-term construction-related effects as those listed under Alternative 6.1. Easy Street Records (WS-82) would be effected by temporary construction visual effects, structural instability, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare. In terms of effects from station construction, the Nucor Steel Mill (WS-14) is located within the APE of the Delridge 2 (Andover) station and would be affected by construction through temporary dirt damage and traffic/parking/access.

Alternative 6.3(s) – Delridge North Subsegment

Three historic properties would be affected by this alternative. The properties include the Nucor Steel Plant (WS-14), the Boysen Apartments (WS-188), and the Shack Coffee Shop (WS-189) temporary dirt damage and traffic/parking/access and through structural instability and vibration impacts.

Only one station alternative would have an effect on historic properties:

Delridge 3 (Nucor): Construction of a station at the Nucor Steel Plant (WS-14) would result in the isolation/alteration of this resource from the surrounding environment.

Alternative 6.4 –Andover/Yancy Subsegment

The Nucor Steel Plant (WS-14) would have adverse visual effects, due to the introduction of new construction, dirt damage, traffic/parking/access, and noise/glare. No historic resources are located within the APE of the station alternatives.

Alternative 6.5 -- Genesee Subsegment

The Cooper Elementary School (WS-187) would have construction-related effects due to visual effects, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare. This building would also have structural instability and vibration impacts.

West Seattle Preferred Alternative

Under this alternative the Nucor Steel Mill (WS-14), Farmers Insurance Group (WS-143), Curious Kid Stuff (WS-97), the Boysen Apartments (WS-188), the Shack Coffee Shop (WS-189), the Cherry Creek Furniture (WS-81), two apartments (WS-116 and WS-117) and four residences (WS-129, WS-148, WS-151, and WS-154) would have short term effects due to construction. These properties would be affected by structural instability, introduction of new construction, dirt damage, traffic/parking/access, and noise/glare. Only the residence (WS-148) would not be affected by structural instability and vibration impacts.

No Action Alternative

No historic resources would be affected by the No Action Alternative.

MITIGATION MEASURES

Measures to mitigate effects to historic resources considered are presented in this section. As with the effect analysis, separate mitigation measures are recommended for application during Green Line construction and during operation. These mitigation measures are presented by Project segment and the different proposed alternative alignments. Specific mitigation for individual resources are being developed in consultation with the State Historic Preservation Officer, the City of Seattle Historic Preservation Officer, Historic Seattle Preservation and Development Authority, the Pioneer Square Preservation Board, and interested parties. SMP and consulting parties will identify mitigation measures that will be addressed in a formal Memorandum of Agreement (MOA). The MOA will be completed and included in the Record of Decision (ROD). See Appendix 7 for a draft of the MOA including a draft education curriculum.

The potential types of mitigation for historic resources associated with undertaking effects are described below. As with the effect analysis, separate mitigation measures are recommended for application during Green Line construction and during operation. Mitigation issues associated with each segment are listed below.

OPERATION IMPACT MITIGATION MEASURES

Demolition

Some of the Green Line alternatives would result in the demolition of historic resources. There are several options to mitigate demolition. Avoiding the resource through selection of other alternatives, and changes in design of a project feature in the specific area of the affected resource(s) could eliminate the need for demolition. Elements of the resource could be reflected or preserved in the design of the station or other structure causing the demolition. If these options are not feasible, recordation and salvage of the resource would mitigate for its loss. Recordation of the resource could be completed prior to any mitigation action, in the form of Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) level documentation, which follows National Park Service (NPS) regulations.

Demolition of any historic resource within the Pioneer Square Preservation District would be reviewed pursuant to SMC 23.66 and the demolition of any designated City landmark would be reviewed pursuant to SMC 25.12. Appropriate mitigation would be developed as required by these provisions.

Non-site specific mitigation could involve finding other opportunities in the community for mitigation measures that are not specific to the affected site. Some of the options for non-site specific mitigation include: the development of an educational program, interpretive displays, design guidelines which focus on compatible materials, massing and scale with historic resources for the introduction of new construction (such as station design), historical Multiple Property NRHP Nominations for certain neighborhoods, and professional publications. These mitigation measures would not be direct mitigation for the effect of the Green Line but would relate to other resources in the area (see Appendix 7).

Traffic Congestion/Access/Isolation

Loss of access or isolation of resources could be minimized through design treatments. Creation of alternative access points, more visible temporary signage, or additional traffic control could facilitate accessibility. There may be a need for a formal Access Mitigation Plan during construction as part of the undertaking (refer to Transportation Section of the Final EIS, Section 4.1).

Noise and Vibration

Increased vibration after the construction of the Green Line could be minimized through vibration suppression, including the setting back of support columns from buildings and effective maintenance to control ground borne vibration, and design treatments. There should be no adverse effects to historic resources from the long-term function of the Green Line (See Noise and Vibration Final EIS Section 4.7). To ensure a thorough assessment of potential damage from construction vibration, an assessment team including a vibration specialist(s), architectural historian, and structural engineer, would walk through affected historic buildings and check on the existing condition of the building. At that time, the vibration specialists will further confirm that the historic buildings are not vibration-sensitive (see Appendix 7).

Visual

There would be effects associated with changes in visual character due to operation of the Green Line. Some visual effects could be mitigated through the placement of guideway columns to avoid major entrances to historic buildings. Station design, construction, materials, and street improvements could be chosen to compliment existing building and street settings. Use of low-effect colors and low-glare glass could reduce some of the effect on stations within the Pioneer Square Historic District or areas such as the Downtown/Pioneer Square Segment with a high number of historic resources.

In areas where the concentration of historic resources is very high such as the Downtown/Pioneer Square Segment and the Pioneer Square Historic District, locations of columns could be planned to avoid placement in front of historic resources, especially building entries. Due to the number of visual effects to historic resources identified within the undertaking where there are no direct mitigation measures, off-site mitigation measures could be proposed, such as the development of a Multiple Property National Register Nomination for specific types of historic resources. (See Appendix 4 and 7, also the Visual Quality and Aesthetic Resources EIS Section 4.5).

The design for Green Line monorail stations and associated street improvements adjacent to historic resources would be subject to design review to ensure compatibility with historic resources.

Change of Use

No effects to historic uses in historic districts have been identified at this time.

**Table NN-4
Adverse Effects by Alternatives**

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
Ballard Segment, Alternative 1.1 or 1.1(s)- West Side of 15 th				
B-60 Residence 7353 15 th Avenue NW				X
B-114 Apartments 1505 NW 60 th Street				X
B-131 Mike's Chili Parlor 1447 NW Ballard Way				X
B-132 Brekke Co. Steel Fabricators 1526 NW 46 th Street				X
B-140 Ballard Bridge			X	X
Ballard Segment, Alternative 1.2 – Center of 15 th				
B-60 Residence 7353 15 th Avenue NW				X
B-114 Apartments 1505 NW 60 th Street				X
B-131 Mike's Chili Parlor 1447 NW Ballard Way			X	X
B-140 Ballard Bridge			X	X
Ballard Segment, Preferred Alternative				
B-60 Residence 7353 15 th Avenue NW				X
B-114 Apartments 1505 NW 60 th Street				X
B-131 Mike's Chili Parlor 1447 NW Ballard Way				X
B-132 Brekke Co. Steel Fabricators 1526 NW 46 th Street				X
B-140 Ballard Bridge			X	X
Interbay/Magnolia Segment, Alternative 2.1 or 2.1(s) - West Side of 15 th /Center of Elliott				
I-25 Residence 3036 16 th Avenue W		X		
I-26 Residence 3032 16 th Avenue W		X		
I-52 Tsubota Steel and Pipe 1641a 15 th Avenue W				X
I-66 Leibold Communications Inc. 1450 15 th Avenue W	X			
I-72 Ace Tank 1123a Elliott Avenue W				X
I-73 Ace Tank 1123b Elliott Avenue W				X
I-74 Ace Tank 1123c Elliott Avenue W				X
I-80 Wilson Machine Works 1038 Elliott Avenue W				X
I-86 Phillips Scale Co. 934b Elliott Avenue W				X

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
Interbay/Magnolia Segment, Alternative 2.1.1 - West Bridge Connection				
I-1C Residence and Storage Fishermen's Terminal			X	X
Interbay/Magnolia Segment, Alternative 2.1.2 - Far West Bridge Connection				
No eligible historic resources				
Interbay/Magnolia Segment, Alternative 2.2 - Center of 15 th /West Side of Elliott				
I-19 Residence 1414 Dravus Street W	X			
I-52 Tsubota Steel and Pipe 1641a 15 th Avenue W				X
I-66 Leibold Communications Inc. 1450 15 th Avenue W	X			
I-72 Ace Tank 1123a Elliott Avenue W				X
I-73 Ace Tank 1123b Elliott Avenue W				X
I-74 Ace Tank 1123c Elliott Avenue W				X
I-80 Wilson Machine Works 1038 Elliott Avenue W				X
I-86 Phillips Scale Co. 934b Elliott Avenue W				X
Interbay/Magnolia Segment, Preferred Alternative				
I-25 Residence 3036 16 th Avenue W		X		
I-26 Residence 3032 16 th Avenue W.		X		
I-52 Tsubota Steel and Pipe 1641a 15 th Avenue W		X ^a		X
I-66 Leibold Communications Inc. 1450 15 th Avenue W				X
I-72 Ace Tank 1123a Elliott Avenue W				X
I-73 Ace Tank 1123b Elliott Avenue W				X
I-74 Ace Tank 1123c Elliott Avenue W				X
I-80 Wilson Machine Works 1038 Elliott Avenue W				X
I-86 Phillips Scale Co. 934b Elliott Avenue W				X
I-1C Residence and Storage Fishermen's Terminal			X	X
Queen Anne/Seattle Center/Belltown Segment, Alternative 3.1 - Seattle Center/Republican				
SC-7 7 Queen Anne Avenue N				X
SC-8 Dalmasso Apartments* 26 W Harrison Street		X		

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
SC-13 Queen Anne Apartments 505 First Avenue N	X			
SC-15 Center House (Seattle Center 305 Harrison Street				X
SC-16 Monorail Terminal, Office, and Track – Seattle Center		X		
SC-22 Memorial Stadium				X
SC-31 Space Needle	X			
SC-32 Seattle Center Fountain	X			

* The Dalmasso Apartments is not eligible by itself, but is eligible as part of a group of similar properties.

Queen Anne/Seattle Center/Belltown Segment, Alternative 3.2 – Mercer**

SC-7 7 Queen Anne Avenue N				X
SC-8 Dalmasso Apartments** 26 W Harrison Street		X		
SC-13 Queen Anne Apartments 505 First Avenue N	X			
SC-16 Monorail Terminal, Office, and Track – Seattle Center		X		
SC-20 Auditorium Apartments 605 Fifth Avenue N				X
SC-31 Space Needle	X			
SC-32 Seattle Center Fountain	X			

** The Dalmasso Apartments is not eligible by itself, but is eligible as part of a group of similar properties. The Dalmasso Apartments would not be demolished, however, the property would be altered by the Green Line over the property.

Queen Anne/Seattle Center/Belltown Segment, Alternative 3.3 - Thomas

SC-7 7 Queen Anne Avenue N				X
SC-8 Dalmasso Apartments** 26 W Harrison Street				X
SC-13 Queen Anne Apartments 505 First Avenue N	X			
SC-15 Center House Seattle Center) 305 Harrison Street				X
SC-16 Monorail Terminal, Office, and Track – Seattle Center		X		
SC-31 Space Needle	X			
SC-32 Seattle Center Fountain	X			

** The Dalmasso Apartments is not eligible by itself, but is eligible as part of a group of similar properties.

Queen Anne/Seattle Center/Belltown Segment, Alternative 3.5 – Second/Denny

SC-7 7 Queen Anne Avenue N				X
SC-8 Dalmasso Apartments** 26 West Harrison Street				X
SC-16 Monorail Terminal, Office, and Track – Seattle Center		X		

** The Dalmasso Apartments is not eligible by itself, but is eligible as part of a group of similar properties. The Dalmasso Apartments would not be demolished, however, the property would be altered by the Green Line over the property.

Resource/Address		No Adverse Effect	Adverse Effects		Visual
			Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	
Queen Anne/Seattle Center/Belltown Segment, Preferred Alternative					
SC-7	7 Queen Anne Avenue N				X
SC-8	Dalmasso Apartments** 26 W Harrison Street		X		
SC-13	Queen Anne Apartments 505 First Avenue N	X			
SC-15	Center House (Seattle Center 305 Harrison Street				X
SC-16	Monorail Terminal, Office, and Track – Seattle Center		X		
SC-22	Memorial Stadium				X
SC-31	Space Needle	X			
SC-32	Seattle Center Fountain	X			
** The Dalmasso Apartments is not eligible by itself, but is eligible as part of a group of similar properties. The Dalmasso Apartments would not be demolished, however, the property would be altered by the Green Line over the property.					
Downtown/Pioneer Square Segment, Alternative 4.1 - West Side of Second					
D-2	Seattle, Chief of the Suquamish Statue/Fifth Avenue, Denny Way, and Cedar Street				X
D-5	2619 Fifth Avenue				X
D-7	420 Vine Street				X
D-10	Fire Station No. 2 2318 Fourth Avenue	X			
D-17	420 Blanchard Street				X
D-18	Fifth Avenue Court Apartments 2132 Fifth Avenue				X
D-26	Sheridan Apartments 2011 Fifth Avenue				X
D-27	Griffin Building 2005 Fifth Avenue				X
D-37	Securities Building 1904 Third Avenue				X
D-33	Centennial Building 1900-1910 Fourth Avenue		X ^b		X ^c
D-34	Times Square Building 414 Olive Way				X
D-35	McGraw Square Fifth Ave./Westlake Ave./Olive Way and Stewart St.				X
D-36	Mayflower Park Hotel 1630 Fourth Avenue				X
D-38	Bon Marche 300 Stewart Street				X
D-40	Josephinum Hotel 1900 Second Avenue				X
D-42	Caffe D'Arte 125 Stewart Street				X
D-43	Inn at the Market (modern) 1601 First Avenue	X			

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
D-46 Triangle Market 1532 Pike Place				X ^d
D-47 First and Pine Building 1535 First Avenue				X ^d
D-49 Doyle Building 1527 Second Avenue				X
D-50 Haight Building 211 Pine Street				X
D-51 United Shopping Tower/Olympic Tower 217 Pine Street				X
D-54 Corner Market NW corner of First Avenue and Pike Street				X ^d
D-57 Eitel Building 1511 Second Avenue		X ^e		X ^d
D-59 Economy Market SW corner of First Avenue and Pike Street				X ^d
D-64 Hadfield Building 1201 Second Avenue				X
D-66 Baillargeon Building 1100 Second Avenue				X
D-67 Federal Reserve Bank Building 1015 Second Avenue		X		
D-68 Exchange Building 821 First Avenue				X
D-69 Puget Sound Bank (Bank of California) 815 Second Avenue				X
D-72 Seattle Trust and Savings Bank / 804 Second Avenue				X
D-73 Hong Kong and Shanghai Banking Corporation Clock 720 Second Avenue				X
D-74 Foster and Marshall Building 720 Second Avenue				X
D-75 Chamber of Commerce Building/215 Columbia Street				X
D-76 Metsker Maps 700 First Avenue				X
D-77 Hoge Building (Carson Boren Home Site) 705 Second Avenue				X
D-78 Dexter Horton Building 710 Second Avenue				X
D-79 Mutual Life Building 605 First Avenue				X
D-80 Lowman Building 107 Cherry Street				X
D-81 Broderick Building (Seattle's Best Coffee) 619 Second Avenue				X

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
D-82 Alaska Building 618 Second Avenue				X
D-85 Pioneer Building,, Pergola, and Totem Pole 606 First Avenue				X
D-86 Butler Garage 601 Second Avenue				X
D-87 610 Second Avenue				X
D-88 Hartford Building 600 Second Avenue				X
D-89 Lyon Building 601 Third Avenue				X
D-90 Café Paloma 93 Yesler Way				X
D-91 Tully's Coffee 99 Yesler Way				X
D-92 Collins Building 520 Second Avenue				X
D-93 519 Third Avenue				X
D-94 512 Second Avenue				X
D-95 Smith Tower 502 Second Avenue				X
D-96 Merchant's Café 109 Yesler Way				X
D-97 Bohemian Nightclub 115 Yesler Way				X
D-98 Flanagan and Lane 102 Yesler Way				X
D-99 Metropole Market 423 Second Avenue Extension S				X
D-100 201 Yesler Way				X
D-101 Frye Apartments 223 Yesler Way				X
D-102 408 Second Avenue Extension S				X
D-103 411 Second Avenue Extension S				X
D-104 410 Second Avenue Extension S				X
D-105 The Last Supper Club 124 S Washington Street				X
D-106 401 Second Avenue Extension S				X
D-107 406 Second Avenue Extension S				X
D-108 400 Second Avenue Extension S				X

	Resource/Address	No Adverse Effect	Adverse Effects		
			Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
D-109	165 S Washington Street				X
D-110	McCoys Firehouse 173 S Washington Street				X
D-111	201 S Washington Street				X
D-112	Union Gospel Mission 211 S Washington Street				X
D-113	Matthews and Chesnin Attorneys 219 S Washington Street				X
D-114	Union Gospel Mission 221 S Washington Street				X
D-115	313 Second Avenue Extension S				X
D-116	208 Second Avenue Extension S				X
D-117	Masins Fine Furniture 220 S Main Street				X
D-118	Comedy Underground 222 S Main Street				X
D-119	Seattle Fire Department Fire Prevention 220 Third Avenue				X
D-120	213 S Main Street				X
D-121	222 S Main Street				X
D-122	James Harris Gallery 307 Second Avenue Extension S				X
D-123	Seattle Lighting Fixture Co. 210 Second Avenue Extension S				X
D-124	Vacant 208 S Jackson Street				X
D-125	Leathers/Gourmet Sausage Co./315 S Jackson Street				X
D-126	King Street Station 301 S Jackson Street			X	X
D-127	Pioneer Square Areaways	X			
D-127a	Sinking Ship Garage Areaway	X			
D-127b	Butler Garage Areaway 601 Second Avenue		X		
D-127c	Broderick Building Areaway 619 Second Avenue		X		
D-128	Times Square Building Areaways	X			
D-129	Columbia Building Areaways	X			
D-131	Pike Place Public Market Historic District				X
D-132	Pioneer Square Historic District			X	

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
Downtown/Pioneer Square Segment, Alternative 4.2 - East Side of Second with Crossover				
D-26 Sheridan Apartments 2011 Fifth Avenue		X		
D-27 Griffin Building 2005 Fifth Avenue		X		
[otherwise same properties as Alignment 4.1, but avoiding demolition of D-33, D-57, and D-67]				
Downtown/Pioneer Square Segment, Alternative 4.3 - Center of Second				
[same properties as Alignment 4.1, but avoiding demolition of D-33, D-127b, and D-127c]				
Downtown/Pioneer Square Segment, Alternative 4.4 – East Center of Second				
D-26 Sheridan Apartments 2011 Fifth Avenue		X		
D-27 Griffin Building 2005 Fifth Avenue		X		
[otherwise same properties as Alignment 4.1, but avoiding demolition of D-33, D-57, and D-67]				
Downtown/Pioneer Square Segment, Preferred Alternative				
D-2 Seattle, Chief of the Suquamish Statue/Fifth Avenue, Denny Way, and Cedar Street				X
D-5 2619 Fifth Avenue				X
D-7 420 Vine Street				X
D-10 Fire Station No. 2 2318 Fourth Avenue	X			
D-17 420 Blanchard Street				X
D-18 Fifth Avenue Court Apartments 2132 Fifth Avenue				X
D-26 Sheridan Apartments 2011 Fifth Avenue				X
D-27 Griffin Building 2005 Fifth Avenue				X
D-37 Securities Building 1904 Third Avenue				X
D-33 Centennial Building 1900-1910 Fourth Avenue				X
D-34 Times Square Building 414 Olive Way				X
D-35 McGraw Square Fifth Ave./Westlake Ave./Olive Way and Stewart St.				X
D-36 Mayflower Park Hotel 1630 Fourth Avenue				X
D-38 Bon Marche 300 Stewart Street				X
D-40 Josephinum Hotel 1900 Second Avenue				X
D-42 Caffè D'Arte 125 Stewart Street				X
D-43 Inn at the Market (modern) 1601 First Avenue	X			

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
D-46 Triangle Market 1532 Pike Place				X
D-47 First and Pine Building 1535 First Avenue				X
D-49 Doyle Building 1527 Second Avenue			X	X
D-50 Haight Building (Second & Pike Building) 211 Pine Street				X
D-51 United Shopping Tower/Olympic Tower 217 Pine Street				X
D-54 Corner Market NW corner of First Avenue and Pike Street				X
D-57 Eitel Building 1511 Second Avenue				X ^c
D-59 Economy Market SW corner of First Avenue and Pike Street				X ^c
D-64 Hadfield Building 1201 Second Avenue				X
D-66 Baillargeon Building 1100 Second Avenue				X
D-67 Federal Reserve Bank Building 1015 Second Avenue		X ^e		
D-68 Exchange Building 821 First Avenue				X
D-69 Puget Sound Bank (Bank of California) 815 Second Avenue				X
D-72 Seattle Trust and Savings Bank 804 Second Avenue				X
D-73 Hong Kong and Shanghai Banking Corporation Clock 720 Second Avenue				X
D-74 Foster and Marshall Building 720 Second Avenue				X
D-75 Chamber of Commerce Building 215 Columbia Street				X
D-76 Metsker Maps 700 First Avenue				X
D-77 Hoge Building (Carson Boren Home Site) 705 Second Avenue				X
D-78 Dexter Horton Building 710 Second Avenue				X
D-79 Mutual Life Building 605 First Avenue				X
D-80 Lowman Building 107 Cherry Street				X

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
D-81 Broderick Building (Seattle's Best Coffee) 619 Second Avenue				X
D-82 Alaska Building 618 Second Avenue				X
D-84 Rector Building				X
D-85 Pioneer Building , Pergola, and Totem Pole 606 First Avenue				X
D-86 Butler Garage 601 Second Avenue				X
D-87 610 Second Avenue				X
D-88 Hartford Building 600 Second Avenue				X
D-89 Lyon Building 601 Third Avenue				X
D-90 Café Paloma 93 Yesler Way				X
D-91 Tully's Coffee 99 Yesler Way				X
D-92 Collins Building 520 Second Avenue				X
D-93 519 Third Avenue				X
D-94 512 Second Avenue				X
D-95 Smith Tower 502 Second Avenue				X
D-96 Merchant's Café 109 Yesler Way				X
D-97 Bohemian Nightclub 115 Yesler Way				X
D-98 Flanagan and Lane 102 Yesler Way				X
D-99 Metropole Market 423 Second Avenue Extension S				X
D-100 201 Yesler Way				X
D-101 Frye Apartments 223 Yesler Way				X
D-102 408 Second Avenue Extension S				X
D-103 411 Second Avenue Extension S				X
D-104 410 Second Avenue Extension S				X
D-105 The Last Supper Club 124 S Washington Street				X
D-106 401 Second Avenue Extension S				X

			Adverse Effects		
			Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
Resource/Address	No Adverse Effect				
D-107 406 Second Avenue Extension S					X
D-108 400 Second Avenue Extension S					X
D-109 165 S Washington Street					X
D-110 McCoys Firehouse 173 S Washington Street					X
D-111 201 S Washington Street					X
D-112 Union Gospel Mission 211 S Washington Street					X
D-113 Matthews and Chesnin Attorneys 219 S Washington Street					X
D-114 Union Gospel Mission 221 S Washington Street					X
D-115 313 Second Avenue Extension S					X
D-116 208 Second Avenue Extension S					X
D-117 Masins Fine Furniture 220 S Main Street					X
D-118 Comedy Underground 222 S Main Street					X
D-119 Seattle Fire Department Fire Prevention/220 Third Avenue					X
D-120 213 S Main Street					X
D-121 222 S Main Street					X
D-122 James Harris Gallery 307 Second Avenue Extension S					X
D-123 Seattle Lighting Fixture Co. 210 Second Avenue Extension S					X
D-124 Vacant 208 S Jackson Street					X
D-125 Leathers/Gourmet Sausage Co. 315 S Jackson Street					X
D-126 King Street Station 301 S Jackson Street				X	X
D-127 Pioneer Square Areaways	X				
D-127a Sinking Ship Garage Areaway	X				
D-127b Butler Garage Areaway 601 Second Ave.		X			
D-127c Broderick Building Areaway 619 Second Ave.		X			
D-128 Times Square Building Areaways	X				
D-129 Columbia Building Areaways	X				
D-131 Pike Place Public Market Historic District					X

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
D-132 Pioneer Square Historic District			X	
SODO/Chinatown ID/PS Segment, Alternative 5.1 - East Side of Third/Utah				
S-58 Markey Machinery Co. 79 S Horton Street				X
S-61 Rainier Cold Storage Building A, southeast corner of S Horton Street and Colorado Avenue S				X
SODO/Chinatown ID/PS Segment, Alternative 5.2 or 5.2(s)- West Side of Third/Utah				
S-26 Bank of America 2764 First Avenue S				X
S-58 Markey Machinery Co. 79 S Horton Street				X
S-61 Rainier Cold Storage Building A, southeast corner of S Horton Street and Colorado Avenue S				X
SODO/Chinatown ID/PS Segment, Preferred Alternative				
S-58 Markey Machinery Co. 79 S Horton Street				X
S-61 Rainier Cold Storage Building A, southeast corner of S Horton Street and Colorado Avenue S				X
West Seattle Segment, Alternative 6.1 or 6.1(s)- West Seattle I				
WS-14 Nucor Steel Mill 2424 SW Andover Street				X
W-81 Cherry Creek Furniture 4554 California Avenue SW	X			
WS-97 Curious Kidstuff 4740 California Avenue SW				X
WS-116 Apartment 5202 California Avenue SW				X
WS-117 Apartment 5206 California Avenue SW				X
WS-129 Residence 5440 California Avenue SW				X
WS-143 Farmers Insurance Group 5922 California Avenue SW				X
WS-148 Residence 5933 California Avenue SW				X
WS-151 Residence 5948 California Avenue SW				X
WS-154 Residence 5956-5958 California Avenue SW				X
West Seattle Segment, Alternative 6.2 – West Seattle II				
WS-14 Nucor Steel Mill 2424 SW Andover Street				X
WS-81 Cherry Creek Furniture 4554 California Avenue SW				X
WS-82 Easy Street Records 4302 Alaska Street				X

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
WS-116 Apartment 5202 California Avenue SW				X
WS-117 Apartment 5206 California Avenue SW				X
WS-129 Residence 5440 California Avenue SW				X
WS-143 Farmers Insurance Group 5922 California Avenue SW				X
WS-148 Residence 5933 California Avenue SW				X
WS-151 Residence 5948 California Avenue SW				X
WS-154 Residence 5956-5958 California Avenue SW				X
West Seattle Segment, Alternative 6.3(s) – Delridge North Subsegment				
WS-14 Nucor Steel Mill 2424 SW Andover Street			X	X
WS-188 Boysen Apartments 2914 SW Avalon Way				X
WS-189 The Shack Coffee Shop 2920 SW Avalon Way				X
West Seattle Segment, Alternative 6.4 – Andover/Yancy Subsegment				
WS-14 Nucor Steel Mill 2424 SW Andover Street			X	X
West Seattle Segment, Alternative 6.5 – Genesee Subsegment				
WS-187 Cooper Elementary School 4408 Delridge Way				X
West Seattle Segment, Preferred Alternative				
WS-14 Nucor Steel Mill 2424 SW Andover Street			X	X
WS-81 Cherry Creek Furniture 4554 California Avenue SW	X			
WS-97 Curious Kidstuff 4740 California Avenue SW				X
WS-116 Apartment 5202 California Avenue SW				X
WS-117 Apartment 5206 California Avenue SW				X
WS-129 Residence 5440 California Avenue SW				X
WS-143 Farmers Insurance Group 5922 California Avenue SW				X
WS-148 Residence 5933 California Avenue SW				X
WS-151 Residence 5948 California Avenue SW				X
WS-154 Residence 5956-5958 California Avenue SW				X

Resource/Address	No Adverse Effect	Adverse Effects		
		Demolition/ Alteration of Property	Isolation/ Alteration of Surrounding Environment	Visual
WS – 188 Boysen Apartments				X
WS-189 The Shack Coffee Shop				X

- ^{*} SLE: Seattle Landmark Eligible (these resources have not yet been formally evaluated by the Seattle Landmarks Board).
- NHL: National Historic Landmark
- ^a Demolition would occur with Howe 1A(Blaine) Station
- ^b Demolition would occur with Fifth/Stewart 1 (Northwest) station.
- ^c Visual adverse effect only would occur with Fifth/Stewart 2 (Virginia) station; demolition not required.
- ^d Visual effect would occur with Pike 1 (West), Option B.
- ^e Demolition would occur with Pike 1 (West), Option A.

Ballard Segment

The types of mitigation measures for all the alternatives within this segment are the same because the types of effects are the same (visual, isolation/alteration of surrounding environment).

The potential mitigation measures listed above could be undertaken for historic resources within this segment. Creative design solutions could be applied to the design, construction and materials of a new Monorail Bridge as currently proposed that parallels the existing Ballard Bridge (B-140), see Appendix 7.

Interbay/Magnolia Segment

The type of mitigation measures for all the alternatives within this segment are the same for historic resources because the types of effects are the same (visual, isolation/alteration of surrounding environment with the exception of the two residences I-25 and I-26, which would be demolished under some alternatives.

The potential mitigation measures listed above could be undertaken for historic resources within this segment in addition to HABS/HAER level documentation for the residences I-25 and I-26 (see Appendix 7).

Operations Center – Interbay Alternative

No mitigation measures are required for historic resources.

Queen Anne/Seattle Center/Belltown Segment

The type of mitigation measures for all the alternatives within this segment are the same for historic resources because the types of effects are the same (visual, demolition/alteration of property). In cases where a resource is found to be adversely affected due to demolition or construction of the Green Line over a residence, such as The Dalmasso Apartments (SC-8), recordation of the resources (HABS/HAER) level documentation could be completed prior to any mitigation action.

The existing monorail is largely responsible for the community's interest in the construction of a new monorail system in Seattle. Preservation of the existing monorail through incorporating the structure into the new Green Line system would be infeasible due to differing technology and engineering systems necessary for the construction of the new system. Leaving the existing monorail in place and routing the new system around it would lead to isolation of the old system due to its limited use area compared to the new system. In addition to HABS/HAER level documentation, the removal of the existing monorail could be mitigated with the introduction of interpretive exhibits featuring the original cars from the monorail at a location such as the Museum of History of Industry (MOHAI). SMP could also provide tours of the new Green Line that would discuss the monorail's legacy in Seattle by highlighting the World's Fair and development of the original monorail system.

Non-site specific mitigation could be undertaken for the numerous historic resources within the Queen Anne/Seattle Center/Belltown Segment that could be visually affected by the introduction of new, non-compatible construction of the Monorail line and stations. A Multiple Property NRHP Nomination of Apartment Buildings within the Lower Queen Anne and Downtown neighborhoods could be required in the MOA.

Downtown/Pioneer Square Segment

Of the potential effects, the greatest potential for concern in the Downtown/Pioneer Square Segment would involve vibration construction-related effects that could affect historic structures, particularly structures located in close proximity to the guideway (Table NN-3). Adverse visual effects to the structures would also occur. The height of the guideways could also block views of the decorative belt coursing located above the second story of some early 20th century historical buildings within the Downtown/Pioneer Square segment. Visual simulations were prepared for many buildings in the Downtown/Pioneer Square Segment, and are included in Appendix 4. The construction of the monorail station adjacent to the Smith Tower will introduce a large modern structure in the Pioneer Square Historic District and obscure the view of the front elevation of the building. The MOA will include specific guidance for the Yesler Station design to mitigation visual impacts. SMP will work with a design team to develop a station that is approved by the SHPO and the Pioneer Square Preservation Board.

Recordation of the resources (HABS/HAER) level documentation could be completed prior to any mitigation action, in cases where a resource is found to be adversely affected due to demolition, (Sheridan Apartments D-26), Centennial Building (D-33), Eitel building (D-57), and the Federal Reserve Bank Building (D-67). Creative design solutions that avoid demolition and/or minimize effects to historic structures could also become mitigation for adverse visual effects. Non-site specific mitigation would be undertaken for the numerous historic resources within the Downtown/Pioneer Square Segment that would be visually affected by the introduction of new, non-compatible construction of the Green Line guideway and stations. A Multiple Property National Register Nomination of Apartment Buildings within the Downtown neighborhoods could be included in the MOA (see Appendix 7).

SODO/Chinatown International District/Pioneer Square Segment

The type of mitigation measures for all the alternatives within this segment are the same for historic resources because the types of effects are the same (visual, isolation/alteration of surrounding environment).

The potential mitigation measures listed above could be undertaken for historic resources within this segment.

Operations Center – SODO Alternative

No mitigation measures are required for historic resources.

West Seattle Segment

The type of mitigation measures for all the alternatives within this segment because the types of effects are the same (visual, demolition/alteration of property). Recordation of the resources (HABS/HAER) level documentation would be completed prior to any mitigation action in cases

where a resource is found to be adversely affected, such as the Green Line route over the Nucor Steel Mill (WS-14) property.

Non-site specific mitigation could be undertaken for the numerous historic resources within the West Seattle Segment that could be visually affected by the introduction of new, non-compatible construction of the Monorail line and stations. A Multiple Property NRHP Nomination of Craftsman Style Buildings within the West Seattle neighborhood could be required in the MOA (Appendix 7).

No-Action Alternative

No mitigation measures would be required if the Green Line is not constructed.

SHORT TERM/CONSTRUCTION IMPACTS MITIGATION MEASURES

(See Appendix 7 for specific mitigation related to the Preferred Alternative)

Ballard Segment

The type of mitigation measures for all the alternatives within this segment are the same because the types of short-term construction effects are the same (construction instability, introduction of new construction, temporary dirt damage, traffic, noise, and visual effects).

The potential mitigation measures listed above could be required for historic resources within this segment.

Interbay/Magnolia Segment

The type of mitigation measures for all the alternatives within this segment are the same because the types of short-term construction effects are the same (construction instability, introduction of new construction, temporary dirt damage, traffic, noise, and visual effects).

The potential mitigation measures listed above could be required for historic resources within this segment.

Queen Anne/Seattle Center/Belltown Segment

The type of mitigation measures for all the alternatives within this segment are the same because the types of short-term construction effects are the same (construction instability, introduction of new construction, temporary dirt damage, traffic, noise, and visual effects). In addition, monitoring for vibration effects to historic resources (masonry) during construction could mitigate the potential damage (see Noise and Vibration EIS Section 4.3).

The potential mitigation measures listed above could be required for historic resources within this segment.

Downtown/Pioneer Square Segment

The type of mitigation measures for all the alternatives within this segment are the same because the types of short-term construction effects are the same (construction instability, introduction of new construction, temporary dirt damage, traffic, noise, and visual effects).

The potential mitigation measures listed above could be required for historic resources within this segment. In addition, monitoring for structural and vibration effects to historic resources (particularly un-reinforced masonry, large concrete block, and load bearing timber structures) along Second Avenue during construction could determine if mitigation is required (see Table NN-3 for monitoring recommendations). As stated in the Noise and Vibration Section (4.7), as pile driving is potentially the greatest source of vibration associated with equipment used during construction, the use of vibratory pile drivers or an auger to install the piles instead of a pile driver could greatly reduce vibration levels.

SODO/Chinatown International District/Pioneer Square Segment

The type of mitigation measures for all the alternatives within this segment are the same because the types of short-term construction effects are the same (construction instability, introduction of new construction, temporary dirt damage, traffic, noise, and visual effects).

The potential mitigation measures listed above could be required for historic resources within this segment.

West Seattle Segment

The type of mitigation measures for all the alternatives within this segment are the same because the types of short-term construction effects are the same (construction instability, introduction of new construction, temporary dirt damage, traffic, noise, and visual effects).

The potential mitigation measures listed above may be required for historic resources within this segment.

Operations Center Alternatives

There are no mitigation measures required for historic resources.

CUMULATIVE IMPACTS

Potential effects to historic resources resulting from construction of the Green Line combined with effects of planned projects in the area could have a significant effect on some of the historic resources identified within the Project APE. For areas such as the Downtown/Pioneer Square Segment, with a high number of historic resources there may be a greater effect. Cumulative effects to historic resources within the Ballard and West Seattle segments are unlikely due to the limited number of historic resources and the types and location of potential projects. In Interbay, the City of Seattle Magnolia Bridge Replacement Project may affect historic resources identified within this segment. The Seattle Public Schools: Memorial Stadium Improvements Project could cause affects to historic resources that have been identified within Seattle Center. Additional private development projects, such as the hotel planned for property on Harrison Street could also affect historic resources. Projects that may affect historic resources within the Downtown and SODO segments include:

- The Alaskan Way Viaduct and Seawall Project,
- The WSDOT/City of Seattle King Street Renovation and Weller Street Bridge Project,

- The WSDOT and City of Seattle SR 519 Project,
- Possible Private Developer Pipeline Projects.

Effects to historic resources within historic districts have an adverse cumulative effect on the integrity of the district. To mitigate for temporary access restrictions, increased truck traffic in the vicinity, possible street closures and traffic detours SMP would work with the City of Seattle to plan detours that have the least impact possible on access to historic buildings. An Access Mitigation Plan may be developed as part of the undertaking (refer to Section 4.1, Transportation).

The construction and operation of the Green Line would have a significant adverse visual effect on individual resources and those located within historic districts. The introduction of new construction would alter view corridors and the ability to see and experience individual buildings. Streetscapes or rights-of-ways would be altered or eliminated (see Visual Simulations, Appendix 4 and Visual Quality and Aesthetics Resources EIS Section 4.5).

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

New construction of the proposed Green Line will have a significant unavoidable adverse effect by altering the character of the setting of significant historic resources and the physical character of Pioneer Square Historic District (D-132). Visual effects to the district and individual historic resources within the district would adversely affect their visual integrity. Some of these effects could be mitigated through creative design solutions such as compatible station design and the placement of columns away from historic buildings. Other adverse effects could be mitigated through off-site mitigation measures (described in the mitigation section) that could compensate for effects. The demolition of historic buildings, however, would be a significant unavoidable adverse effect, unless it can be avoided through redesign.

BIBLIOGRAPHY

Ballard News Tribune 1988 *Passport to Ballard – the Centennial Story*. Seattle.

Berner, Richard C.

1992 *Seattle 1921-1940: From Boom to Bust*. Charles Press, Seattle.

1999 *Seattle Transformed: World War II to Cold War*. Charles Press, Seattle.

Burke, P.

1976 *A History of the Port of Seattle*. Port of Seattle, Seattle.

Courtois and Associates

1999 Technical Report: Historic and Prehistoric Archaeological Sites, Historic Resources, Native American Traditional Cultural Properties, Paleontological Sites. In *Central Link Light Rail Transit Project Final Environmental Impact Statement*, prepared for Sound Transit. Seattle.

Crowley, W.

1998 *National Trust Guide - Seattle*. John Wiley and Sons, New York.

Demuth, K. and M. Montgomery

2001 *Atlantic/Central Bus Base Expansion Project Historic Resource Technical Memorandum*. ENTRIX, Inc., Seattle.

Eals, C., editor

1987 *West Side Story*. West Seattle Herald/White Center News. Seattle.

Ficken, R. and LeWarne, C.

1988 *Washington: A Centennial History*. University of Washington Press, Seattle.

Hart Crowser, Inc.

1996 Cultural, and Archaeological Resources Technical Report. In *Washington State Major League Baseball Stadium Project, Appendix H*. Prepared for Shapiro and Associates, Inc., Seattle.

HistoryLink

n.d. "Interbay - Thumbnail History." On the Internet: www.historylink.org.

Kreisman, L.

1999 *Made to Last: Historic Preservation in Seattle and King County*. University of Washington Press, Seattle and London.

Mighetto, L. and Montgomery, M.

2002 *Hard Drive to the Klondike*. University of Washington Press, Seattle.

Morgan, Murray

1951 *Skid Road: An Informal Portrait of Seattle*. University of Washington Press, Seattle.

Ochsner, Jeffrey Karl

1994 *Shaping Seattle Architecture: A Historical Guide to the Architects*. University of Washington Press, Seattle and London.

Sale, R.

1976 *Seattle – Past to Present*. University of Washington Press, Seattle and London.

Sayre, J.

1937 *The Early Waterfront of Seattle*. J.W. Sayre, Seattle.

Sheridan, M.

2002 *Historic Property Survey Report: Seattle's Neighborhood Commercial Districts*. Prepared for City of Seattle, Department of Neighborhoods, Historic Preservation Program. Seattle.

Wandrey, M. I.

1975 *Four Bridges to Seattle; Old Ballard 1853-1907*. Ballard Printing and Publishing, Seattle.

Woodbridge, S.B. and R. Montgomery

1980 *A Guide to Architecture in Washington State*. University of Washington Press, Seattle and London.

Appendix 1
Agency Correspondence

Agency Historical Resources Work Sessions

Date	Subject	Persons Present
May 16, 2003	Discussed the eligibility of historic resources in SODO and West Seattle, as well as written comments provided by Allyson Brooks (OAHF) and Michael Sullivan (City of Seattle) regarding the historic resource information packets submitted by ENTRIX for SODO, West Seattle, and Ballard	Allyson Brooks (OAHF), Kimberly Demuth (ENTRIX), Marcia Montgomery (ENTRIX), Michael Sullivan and Spencer Howard (Artifacts, Inc., consultant to City of Seattle)
May 21, 2003	Discussed the eligibility of and impacts to historic resources in SODO and West Seattle	Allyson Brooks (OAHF), Karen Gordon (City of Seattle), Kimberly Demuth (ENTRIX), Marcia Montgomery (ENTRIX), and Michael Sullivan (Artifacts, Inc., consultant to City of Seattle)
May 23, 2003	Discussed the eligibility of and impacts to historic resources in Ballard	Allyson Brooks (OAHF), Karen Gordon (City of Seattle), Helene Kornblatt (SMP), Kimberly Demuth (ENTRIX), Marcia Montgomery (ENTRIX), and Michael Sullivan (Artifacts, Inc., consultant to City of Seattle)
May 28, 2003	Discussed the eligibility, impacts/mitigation measures for historic resources in Seattle Center and Downtown	Allyson Brooks (OAHF), Karen Gordon (City of Seattle), Helene Kornblatt (SMP), Kimberly Demuth (ENTRIX), Marcia Montgomery (ENTRIX), Michael Sullivan and Spencer Howard (Artifacts, Inc., consultant to City of Seattle)
June 4, 2003	Discussed the additional research requested by Allyson Brooks (OAHF) on selected resources in all segments and mitigation for all segments	Kimberly Demuth (ENTRIX) and Michael Sullivan (Artifacts, Inc., consultant to City of Seattle) on conference call, Allyson Brooks (OAHF), Karen Gordon (City of Seattle) and Michael Sullivan (Artifacts, Inc., consultant to City of Seattle) calling in
December 9, 2003	Discussed proposed mitigation measures for historic resources	Staff from SMP, OAHF, City of Seattle, Historic Seattle, and ENTRIX, Inc.
January 14, 2004	Discussed proposed mitigation measures for historic resources	Staff from SMP, OAHF, City of Seattle, and Historic Seattle
January 21, 2004	Meeting with a representative of the Advisory Council on Historic Research	Staff from SMP, OAHF, City of Seattle, Historic Seattle, ENTRIX, Inc., and Advisory Council on Historic Preservation



STATE OF WASHINGTON
Office of Archaeology and Historic Preservation
1063 S. Capitol Way, Suite 106 - Olympia, Washington 98501
(Mailing Address) PO Box 48343 - Olympia, Washington 98504-8343
(360) 586-3065 Fax Number (360) 586-3067

RECEIVED
FEB 12 2004
ENTRIX 89267

February 10, 2004

Ms. Kimberly Demeuth
Senior Consultant, Entrix, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121

In future correspondence please refer to:
Log: 021004-01-KI
Property: MONORAIL - GREEN LINE
Re: Determinations of Eligibility

Dear Ms. Demeuth:

Thank you for contacting the Washington State Office of Archaeology and Historic Preservation (OAHP). The above referenced project has been reviewed on behalf of the State Historic Preservation Officer under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. My review is based upon documentation contained in your communication.

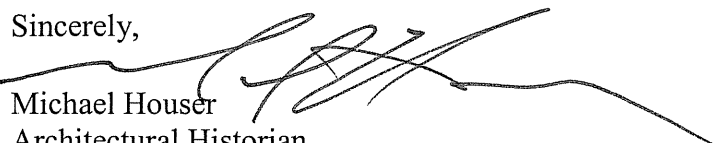
Research indicates that the one of the referenced properties within the project area is currently listed in the Washington Heritage Register and the National Register of Historic Places, Frank B. Cooper Elementary School, listed in March of 2003. I concur with your findings that the other two referenced properties, the Boysen Apartments and the Boysen Real Estate Office are ELIGIBLE for the National Register of Historic Places under criterion C as intact example of their style and type. I also concur with your finding that that the Naval Supply Depot Building is NOT ELIGIBLE for the National Register of Historic Places as a stand alone isolate resource.

As a result of this finding, further contact with OAHP will be necessary to mitigate the impact of the proposed Green Line on the eligible resources if this project comes to fruition.

We have noted that OAHP has not yet to receive any historic property inventory forms for any of the resources within the monorail project area and want to remind you that these are required as part of the completion of this project. If you are going to have trouble providing these inventory forms, please notify us as soon as possible.

Thank you for the opportunity to review and comment. Should you have any questions please feel free to contact me.

Sincerely,


Michael Houser
Architectural Historian
(360) 586-3076

ENTRIX, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121
(206) 269-0104
(206) 269-0098 Fax

January 24, 2004

Dr. Allyson Brooks
Washington State Historic Preservation Officer
Office of Archaeology and Historic Preservation
1063 S. Capitol Way
Olympia, WA 98504-8343

RE: National Register of Historic Places (NRHP) eligibility for additional buildings located within the area of potential effect (APE) for the Monorail Green Line in Interbay and West Seattle.

Dear Allyson:

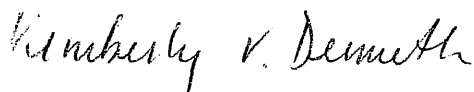
In accordance with Section 106 of the National Historic Preservation Act, the National Environmental Policy Act, and Washington State Environmental Policy Act, ENTRIX has been conducting the historic buildings and structures review for the proposed Monorail Green Line Environmental Impact Statement (EIS) (Project). You have already provided review and concurrence on most of the historical resources located within the Project APE. Since the publication of the Green Line Draft EIS, several alternatives not studied in detail in the Draft EIS and several refined station locations have been added for review in the Final EIS. In West Seattle, the new alternatives included study areas outside the original project APE. Map 1 (attached) illustrates the location of the new study areas, which are highlighted in yellow. The APE for the new study areas is the same as concurred upon for the other portions of the project, described as: 100 feet on either side of the proposed guideway and 200 feet around station locations.

In the new study areas, architectural historians conducted field investigations to identify resources that appeared eligible for the National Register of Historic Places (NRHP). In response to the additional field investigations, I am requesting your review and concurrence on the following three West Seattle resources that I believe are eligible for the NRHP: the Cooper Elementary School (WS-187), Boysen Apartments (WS-188), and the Shack Coffee Shop (WS-189). The property numbers for these buildings are highlighted on Map 1. I also recommend that the Interbay Naval Supply Depot Building (I-99) is not eligible for the NRHP. The location of this building is within the study area for the proposed Interbay Operations Center, as illustrated on Map 2. Please see the attached information for a historical summary and details regarding the NRHP recommendations.

L L L L
L L L L
L L L L
L L L L

ENTRIX, Inc. also prepared the *Green Line EIS Areaways Study* that was submitted to you for review and concurrence on the NRHP findings. This report assessed the historical and architectural significance of 34 areaways located north of the Pioneer Square along the proposed Green Line. The report identifies two areaways, the Times Square Building (D-128) and Columbia Building (D-129), as eligible for the NRHP. I would appreciate your providing me with your review and concurrence on the areaways study, as well as the, APE for the new West Seattle study areas, and the NRHP-eligibility recommendations for the Cooper Elementary School (WS-187), Boysen Apartments (WS-188), Shack Coffee Shop (WS-189), and Naval Supply Depot (WS-99). If you have any questions regarding the enclosed information please contact me or Marcia Montgomery at (206) 269-0104. I would greatly appreciate your response by Monday February 2, 2004.

Sincerely,



Kimberly V. Demuth
Senior Consultant

Cc Helene Kornblatt, Seattle Monorail Project
Roger Pearce, Foster, Pepper & Shefelman
Karen Gordon, City of Seattle
John Perlic, Parametrix, Inc.



Since 1984 - Environmental Excellence

ENTRIX, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121
(206) 269-0104
(206) 269-0098 Fax

April 25, 2003

Ms. Allyson Brooks
Washington State Historic Preservation Officer
Office of Archaeology and Historic Preservation
1063 S. Capitol Way
Olympia, WA 98504-8343

RE: National Register of Historic Places (NRHP) eligibility for buildings and structures located within the Seattle Monorail Greenline Area of Potential Effect (APE).

Dear Allyson:

In accordance with Section 106 of the National Historic Preservation Act, the National Environmental Policy Act, and Washington State Environmental Policy Act, ENTRIX is conducting the historic buildings and structures review for the proposed Monorail Greenline Environmental Impact Statement (EIS) (Project). The Monorail is divided into the following six segments extending 14 miles north to south in Seattle: Ballard, Interbay, SODO, West Seattle, Seattle Center, Downtown and West Seattle. ENTRIX will be submitting to you for your concurrence our assessment of the NRHP significance of buildings within each segment. We will be providing you with separate packets of information on each segment, with the exception of our combining information regarding the Seattle Center and Downtown segments. You should also be aware that the specific Project segment boundaries for the Downtown and SODO segments bisect the Pioneer Square Historic District. For the purposes of our NRHP review, we will extend the boundaries of the Downtown segment study area to include the entire Pioneer Square Historic District.

Our study methodology for this project consisted of making site visits and photographing previously recorded buildings and structures for which nomination and inventory forms exist in order to evaluate the current condition of the resource. Our staff also conducted field evaluations and research in order to identify buildings and structures (resources) 50 years of age that are eligible for the NRHP and will need to be addressed in the impacts analysis. In accordance with SEPA, ENTRIX assessed the significance of noteworthy resources that are over 25 years of age that will be demolished by the project alternatives. The location of these resources will be identified on maps for each segment. For field purposes, we assigned resources to one of the following categories.

- Category A Historically significant resources
- Category B Unaltered resources with potential historical or architectural merit
- Category C Altered resources lacking historical integrity and historical or architectural merit

Resources that have been previously identified as eligible for or listed as NRHP, Washington Heritage Register, Seattle Landmark properties were assigned to Category A. For Category B properties, ENTRIX prepared a form that includes a current photograph of the resource, property address, date of construction, a brief summary of the resource's history, and a list of any modifications to the resource. When available, supporting historical documentation such as historical King County Assessor's records, Sanborn Fire Insurance Maps, and relevant newspaper articles was provided for Category B properties. Category C properties were photographed and mapped. Within a historic properties summary table for each segment, ENTRIX summarized information regarding the historical significance of all properties. The table includes

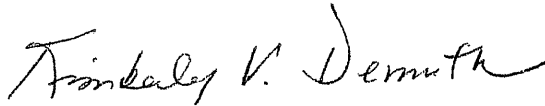
E N T R I X

the property address, date of construction, and reason for its category listing. The reasons for listing properties in Category C include lack of integrity or no apparent significance. Resources that are unmodified, but date to the late historical period (late 1930s-1953) and lack noteworthy architectural style or known historical associations were also assigned to Category C.

For each segment, I will provide you a packet of information that includes a historical properties summary table, maps, a historical context statement for the segment, and photographs of buildings and structures 50 years of age. The segment summary tables assign numbers to each resource studied. This resource number is used to specify the location of the property on the segment maps and has been assigned to the inventory forms for each property. The summary table also provides a column for you to list if you concur with the findings of historical significance for each property. Please make a copy of the summary table and fill in the column for Agency Concurrence and return to me.

The enclosed information pertains to historical buildings and structures located within the Monorail SODO segment. Next week, I will provide you with a packet of information for the West Seattle segment. In May, I will provide you with packets for the Ballard, Downtown/Seattle Center, and Interbay segments. Next week, I will send you a schedule for my submitting the remaining packets and impacts analysis based on our conversation today. Please contact me with any questions you may have regarding the enclosed materials.

Sincerely,



Kimberly V. Demuth
Senior Consultant

Cc Helene Kornblatt, Seattle Monorail Project
Roger Pearce, Foster, Pepper & Shefelman
Karen Gordon, City of Seattle
John Perlic, Parametrix, Inc.



STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
(Mailing Address) PO BOX 48343 • Olympia, Washington 98504-8343
Phone (360) 586-3065 FAX (360) 586-3067

April 28, 2003

Ms. Kimberly Demeuth
Senior Consultant
Entrix, Inc.
2701 First Avenue
Seattle, WA 98121

RECEIVED
APR 30 2003
ENTRIX seattle

In future correspondence please refer to:
Log: 042803-19-USCG
Property: Seattle Monorail
Re: NOT Eligible and more info. needed

Dear Ms. Demeuth:

Thank you for contacting the Washington State Office of Archaeology and Historic Preservation (OAHP). The above referenced property has been reviewed on behalf of the State Historic Preservation Officer under provisions of Section 106 of National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. My review is based upon documentation contained in your communication.

I concur that the following 53 properties checked off on the attached inventory form are NOT ELIGIBLE for the National Register of Historic Places. However, the following sites require more information:

2764 1st Ave. S. – please describe the context of the architecture in terms of other Bank of America buildings. Please compare this example to others.

2915 1st Ave. S. – Please provide a more detailed justification for your determination.

2931 1st Ave. S., - Please provide a more detailed justification for your determination. This property should be examined as an example of an art deco style building.

2945 1st Ave. S., 2951 1st Avenue S. (bldg. A) and 2951 1st Avenue S. (bldg. B) – Please provide a more detailed analyses and explanation for your determination.

79 S. Horton Street – Some of the maps provided did not match the form provided to our office, others were not readable. Please resubmit with readable documents and a better explanation for your determination.

SE corner of S. Horton St. and Colorado – For the reasons listed for 79 S. Horton Street, please resubmit your determination with more information. The documentation for this project is very confusing.

We looking forward to receiving Category Status B properties on our historic property inventory forms.



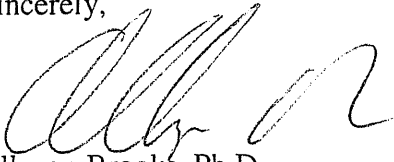
Demeuth

Page 2

4/28/03

Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Allyson Brooks', with a stylized flourish at the end.

Allyson Brooks, Ph.D

State Historic Preservation Officer

(360) 586-3066

AllysonB@cted.wa.gov

Sodo Segment Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Hist./Arch. Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions			
S-1	1731 4th Ave. S.	Metro Pacific Community credit Union	1948	C	ineligible		x	x	x				✓	
S-2	1741 4th Ave. S.		1940	C	ineligible		x	x	x	x			✓	
	Railroad Tracks between S. Holgate St. and S. Walker St.												✓	
S-3		Railroad Shelter	Unknown	C	ineligible				x					
S-4	1943 4th Ave. S.	Drivelines NW	1930	C	ineligible		x	x					✓	
S-5	2215 4th Ave. S.	Ben's Cleaner Sales Inc.	1948	C	ineligible		x	x	x		x		✓	
S-6	2221 4th Ave. S.	Ben's Cleaner Sales Inc.	1951	C	ineligible		x		x				✓	
S-7	2227 4th Ave. S	Animal Hospital	1945	C	ineligible		x		x				✓	
S-8	2250 Occidental Ave. S.	Distributor's Warehousing Co.	1953	C	ineligible							x	✓	
S-9	2400 1st Ave. S.		1925	C	ineligible		x	x	x				✓	
S-10	2406 1st Ave. S.		1926	C	ineligible		x	x	x				✓	
S-11	2418 1st Ave. S.		1928	C	ineligible		x	x					✓	
S-12	2424 1st Ave. S.		1918	C	ineligible		x	x					✓	
S-13	2440 1st Ave. S.		1927	C	ineligible		x	x	x				✓	
S-14	2444 1st Ave. S.		1941	C	ineligible				x				✓	
S-15	2450 1st Ave. S.	Unknown	1937	C	ineligible		x						✓	
S-16	2456 1st Ave. S.	Sherman Plumbing	1929	C	ineligible		x	x	x				✓	
S-17	2462 1st Ave. S.	Earthwise Building	1918	C	ineligible		x	x	x				✓	
S-18	76 S. Lander St.	Sears	1935	C	ineligible		x	x					✓	
S-19	2700 1st Ave. S.	Western Neon	1905	C	ineligible		x	x	x				✓	
S-20	85 S. Lander St.	Lemieux's	1926	C	ineligible		x	x	x				✓	
S-21	2710 1st Ave. S.		1926	C	ineligible		x	x					✓	
S-22	2720 1st Ave. S.		1907	C	ineligible		x	x					✓	
S-23	2724 1st Ave. S.		1926	C	ineligible		x	x	x				✓	
S-24	2731 1st Ave. S.		1928	C	ineligible		x	x	x				✓	
S-25	2737 1st Ave. S.	Moeller Design & Development	1900	C	ineligible		x	x					✓	
S-26	2764 1st Ave. S.	Bank of America	1946	B	ineligible		x	x				x	✓	✓
S-27	2909 1st Ave. S.	Ajax Electric/Malden Mills	1927	C	ineligible		x	x					✓	

21

Sodo Segment Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Hist./Arch. Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions			
S-28	2900 1st Ave. S.	Western Foil	1909	C	ineligible		x	x	x				/	
S-29	2901 Utah Ave. S.		1953	C	ineligible						x		/	
S-30	2910 1st Ave. S.		1933	C	ineligible		x	x					/	
S-31	2915 Utah Ave. S.		1953	C	ineligible						x			/
S-32	2915 1st Ave. S.	Industrial Pump Sales Company	1929	C	ineligible		x	x					/	
S-33	2921 Utah Ave. S.		1953	C	ineligible		x		x				/	
S-34	2918 1st Ave. S.	Industrial Supply	1921	C	ineligible		x	x	x				/	
S-35	2921 1st Ave. S.		1907	C	ineligible		x	x	x				/	
S-36	2925 1st Ave. S.	Ederer	1928	C	ineligible		x	x	x				/	
S-37	2935 Utah Ave. S.	Washington Chain and Supply Co.	1953	C	ineligible			x			x		/	
S-38	2936 Utah Ave. S.		1948	C	ineligible		x		x				/	
S-39	2936 Utah Ave. S. (Bldg. B)		1948	C	ineligible		x		x				/	
S-40	2931 1st Ave. S.		1930	B	ineligible							x		/
S-41	2945 1st Ave. S.		1900	C	ineligible		x	x	x				/	
S-42	2959 Utah Ave. S.		1943	B	ineligible							x		/
S-43	2951 1st Ave. S. (Bldg. A)		1941	C	ineligible		x		x					/
S-44	2951 1st Ave. S. (Bldg. B)		1926	B	ineligible		x	x				x	/	
S-45	2944 1st Ave. S.	Gorlick's/Gorlick Mufflers	1918	C	ineligible		x	x	x				/	
S-46	2963 Utah Ave. S.		1929	C	ineligible		x	x	x				/	
S-47	2963 1st Ave. S.	Dick's Restaurant Supply	1923	C	ineligible		x	x	x				/	
S-48	2962 1st Ave. S.		1917	C	ineligible		x	x					/	
S-49	3201 Utah Ave. S.	Dong Vinh, Inc.	1926	C	ineligible		x	x			x		/	
S-50	3201 1st Ave. S.	K.R. Trigger Building	1923	C	ineligible		x	x					/	
S-51	3207 1st Ave. S.	Vertigo Building/Zephyr Communications	1917	C	ineligible		x	x					/	
S-52	3200 1st Ave. S.	Andrews Brothers Building (Herban Patio)	1924	C	ineligible		x	x	x				/	
S-53	3220 1st Ave. S.	Herban Pottery	1924	C	ineligible		x	x	x				/	
S-54	3230 - 3228 1st Ave. S.		1937	C	ineligible								/	

✓
 ✓
 ✓
 ✓

Sodo Segment Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Hist./Arch. Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions			
S-55	SE corner of S. Horton St. and Colorado	PSF Industries, Inc.	ca. 1936	C	ineligible		x	x	x				✓	
S-56	65 S. Horton ST.	PSF Industries, Inc.	ca. 1936	B	ineligible						x		✓	
S-57	Building immediately East of 65 S. Horton	PSF Industries, Inc.	1917	C	ineligible		x	x	x				✓	
S-58	79 S. Horton St.	Markey	1917	B	eligible	C								✓
S-59	3301 1st Ave. S.	Western Steel	1917	C	ineligible		x	x	x				✓	
S-60	3225 E. Marginal Way S.	Rainier Cold Storage Buildings #1	ca. 1925	C	ineligible		x	x	x				✓	
S-61	SE corner of S. Horton St. and Colorado	Rainier Cold Storage Buildings A & B	ca. 1915	B	eligible	A								✓



RECEIVED

MAY 16 2003

ENTRIX

STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501

(Mailing Address) PO Box 48343 • Olympia, Washington 98504-8343

Phone (360) 586-3065 FAX (360) 586-3067 Web Site: www.oahp.wa.gov

May 14, 2003

Kimberly Demuth
Entrix, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121

RE: 041403-02-USCG
Seattle Monorail
West Seattle Eligibility Determinations

Dear Ms Demuth:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (as amended), and implementing regulations, 36 CFR Part 800, the Office of Archaeology and Historic Preservation has made the following concurrences with your determinations:

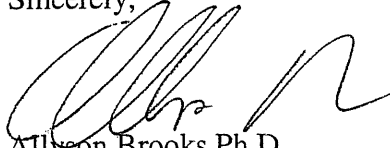
We concur that 164 properties in West Seattle are Not Eligible for the National Register of Historic Places. A few of these have been determined eligible for the Washington Heritage Register in conjunction with the City of Seattle. This list will be supplied to you by the City of Seattle.

We concur that WS-81, WS-143 and WS-154 are eligible for the National Register of Historic Places.

The following properties will require more information and a more in-depth evaluation for the office to reach a concurrence on their National Register status: WS-13, WS-14, WS-41, WS-53, WS-82, WS-101, WS-104, WS-105 (we would like an explanation as to whether 104 and 105 are possibly part of a district), WS-115, WS-116, WS-117, WS-129, WS-137, WS-146, WS-148, and WS-151.

If you have any questions or concerns please do not hesitate to contact me at (360) 586-3066. You can also reach me by e-mail at allysonb@cted.wa.gov. Your concern for protecting the heritage of our state is appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read 'Allyson Brooks', with a stylized flourish at the end.

Allyson Brooks Ph.D.

State Historic Preservation Officer

cc: Karen Gordon, Seattle Historic Preservation Officer
Helene Kornblatt, Seattle Monorail Project
Michael Sullivan, Artifacts Consulting



RECEIVED

MAY 16 2003

ENTRIX

STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501

(Mailing Address) PO Box 48343 • Olympia, Washington 98504-8343

Phone (360) 586-3065 FAX (360) 586-3067 Web Site: www.oahp.wa.gov

May 14, 2003

Kimberly Demuth
Entrix, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121

RE: 041403-02-USCG
Seattle Monorail
Ballard Eligibility Determinations

Dear Ms. Demuth:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (as amended), and implementing regulations, 36 CFR Part 800, the Office of Archaeology and Historic Preservation has made the following concurrences with your determinations:

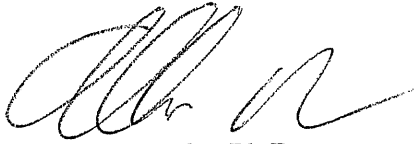
We concur that 129 properties in Ballard are Not Eligible for the National Register of Historic Places. A few of these have been determined eligible for the Washington Heritage Register in conjunction with the City of Seattle. This list will be supplied to you by the City of Seattle.

We concur that B-60, B-114, B-131, and B-140 are eligible for the National Register of Historic Places.

The following properties will require more information and a more in-depth evaluation for the office to reach a concurrence on their National Register status: B-14, B-15, B-16, B-17 (we would like an explanation as to whether these are part of a district), B-116, B-132, and B-137.

If you have any questions or concerns please do not hesitate to contact me at (360) 586-3066. You can also reach me by e-mail at allysonb@cted.wa.gov. Your concern for protecting the heritage of our state is appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read 'Allyson Brooks', with a stylized flourish at the end.

Allyson Brooks, Ph.D.
State Historic Preservation Officer

cc: Karen Gordon, Seattle Historic Preservation Officer
Helene Kornblatt, Seattle Monorail Project
Michael Sullivan, Artifacts Consulting



RECEIVED

JUN 06 2003

STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

ENTRIX seattle

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
(Mailing Address) PO Box 48343 • Olympia, Washington 98504-8343
Phone (360) 586-3065 FAX (360) 586-3067 Web Site: www.oahp.wa.gov

June 3, 2003

Ms. Kimberly Demeuth
Entrix
2701 First Avenue, Suite 300
Seattle, WA 98121

In future correspondence please refer to:

Log: 060303-11-USCG

Property: Seattle Monorail

Re: Determination of Eligibility for the National Register of Historic Places

Dear Ms. Demeuth:

Thank you for contacting the Washington State Office of Archaeology and Historic Preservation (OAHP). The above referenced property has been reviewed on behalf of the State Historic Preservation Officer under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. My review is based upon the documentation contained in your communication.

Based upon the documentation provided to the office we concur that 57 properties are Not Eligible for the National Register of Historic Places and 31 properties are Eligible. We will require further information on the following properties: SC-12, SC-19, SC-22, SC-23, D-1, D-8, D-9, D-20, D-24, D-27, D-29, D-45, D-58 and D-84.

Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Allyson Brooks, Ph.D
State Historic Preservation Officer
(360) 586-3066
AllysonB@cted.wa.gov

DRAFT

Seattle Center-Downtown Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission					Concurrence	
							Alteration				Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions		
SC-1	350 Elliott Av. W.	Shanty Café	1926	C	Ineligible		x	x	x	x		✓	
SC-2	215 W. Harrison	Unknown	1950	C	Ineligible						x	✓	
SC-3	325 W. Harrison	J. Wm. C. Building	1950	C	Ineligible						x	✓	
SC-4	111 W. Harrison	Unknown	1951	C	Ineligible						x	✓	
SC-5	333 W. Harrison	Unknown	1953	C	Ineligible						x	✓	
SC-6	401 W. Harrison	Unknown	1919	C	Ineligible		x	x	x			✓	
SC-7	7 Queen Anne Ave. N.	Unknown	1908	B	Eligible	C						✓	
SC-8	26 W. Harrison St.	Delmasse Apartments	1930	B	Eligible	C						✓	
SC-9	168 Denny Way	Allstate Insurance	1949	C	Ineligible						x	✓	
SC-10	204 Denny Way	The Frol Building	1946	C	Ineligible						x	✓	
SC-11	351 Denny Way	76 Gas Station	1948	C	Ineligible						x	✓	
SC-12	325 Denny Way	Wells Fargo Bank	1951	C	Ineligible								
SC-13	505 1st Ave. N.	Queen Anne Apartments	1930	B	Eligible	C						✓	
SC-14	305 Harrison St.	Northwest Rooms	1962	B	Ineligible		x	x	x	x		✓	
SC-15	305 Harrison St.	Center House	1938?	B	Eligible	C						✓	
SC-16	Seattle Center	Monorail Terminal, Office, and Track	1962	A	SL listed	?							
SC-17	125 Mercer St.	Coffee Zingaro	unknown	C	Ineligible		x	x				✓	
SC-18	150 Mercer St.	U-Park System	unknown	C	Ineligible						x	✓	
SC-19	170 Mercer St.	Peasley Ross & Co.	1951	C	Ineligible						x		
SC-20	605 5th Ave. N.	Auditorium Apartments	1926	B	Eligible	C						✓	
SC-21	500 Mercer St.	Tower Records	1923	C	Ineligible		x	x	x			✓	
SC-22	Seattle Center	Memorial Stadium	1948	B	Ineligible						x		
SC-23	505 Harrison St.	Polly Esther's	1929	C	Ineligible		x	x					
SC-24	319 Broad St.	City Light Broad Street Substation	1929	B	Eligible	A						✓	
SC-25	206 5th Ave. N.	Zak's Saloon	1947	B	Ineligible		x	x	x			✓	

Seattle Center-Downtown Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions			
SC-26	416 John St.	Unknown	1945	C	Ineligible		x	x					✓	
SC-27	131 Taylor Ave. N.	Unknown	1949	C	Ineligible						x		✓	
SC-28	118 5th Ave. N.	Seattle Electric Works (now vacant)	1912	B	Ineligible		x	x	x				✓	
SC-29	112 5th Ave. N.	Office	1905	B	Ineligible		x	x	x				✓	
SC-30	508 Denny Way	Fat City Motors	1910	B	Ineligible								✓	
D-1	419 Denny Way	Zeek's Pizza	1900	B	Ineligible		x	x						
D-2	5th Ave. Denny Way, and Cedar St.	Seattle, Chief of the Suquamish Statue		A (WHR, SL)	Listed	C							✓	
D-3	415 Cedar St.	Golden Singha Thai Cuisine	1922	B	Ineligible		x	x					✓	
D-4	501 Denny Way	Cleaners	1949	C	Ineligible						x		✓	
D-5	2619 5th Ave.	Unknown	1929	B	Eligible	C							✓	
D-6	2609 5th Ave.	Unknown	1910	C	Ineligible		x	x	x					
D-7	420 Vine St.	Davenport Apartments	1925	B	Eligible	C							✓	
D-8	500 Vine St.	Unknown	1949	C	Ineligible						x		✓	
D-9	521 Wall St.	Unknown	1947	B	Ineligible		x						✓	
D-10	2318 4th Ave.	Fire Station No. 2	1921	A (SL)	Eligible	C							✓	
D-11	2235 5th Ave.	American Games	1919	B	Ineligible		x	x					✓	
D-12	2225 5th Ave.	Retail Store	1946	B	Ineligible		x	x		x			✓	
D-13	2221 5th Ave.	Unknown	1953	B	Ineligible						x		✓	
D-14	2218 5th Ave.	Unknown	1948	C	Ineligible						x		✓	
D-15	2217 5th Ave.	Unknown	1953	B	Ineligible						x		✓	
D-16	2211 5th Ave.	Unknown	1913	B	Ineligible		x	x					✓	
D-17	420 Blanchard St.	Windham Apartments	1925	B	Eligible	C							✓	
D-18	2132 5th Ave.	5th Avenue Court Apartments	1922	B	Eligible	C							✓	

Seattle Center-Downtown Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission					Concurrence	
							Alteration				Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch			
D-19	2127 5th Ave.	Unknown	1924	C	Ineligible		x	x				✓	
D-20	2124 5th Ave.	Top Pot Doughnuts	1950	B	Ineligible						x		
D-21	2121 5th Ave.	Unknown	1924	C	Ineligible		x	x				✓	
D-22	2115 5th Ave.	Unknown	1929	C	Ineligible		x	x				✓	
D-23	2100 5th Ave.	Western Printing Co.	1927	B	Eligible		x	x				✓	
D-24	2030 5th Ave.	Jordon Building	1920	B	Ineligible		x	x				✓	
D-25	2025 5th Ave.	Kirin Sushi	1920	C	Ineligible		x	x'	x			✓	
D-26	2011 5th Ave.	Sheridan Apartments	1914	B	Eligible	C	x					✓	
D-27	2005 5th Ave.	Griffin Building	1927	B	Ineligible		x	x					
D-28	1927 5th Ave.	Icon Grill	1923	C	Ineligible		x	x	x			✓	
D-29	1923 5th Ave.	Ford Graphics	1928	B	Ineligible					x		✓	
D-30	1921 5th Ave.	Nation	1915	B	Ineligible		x	x				✓	
D-31	1913 5th Ave.	Avis	1928	B	Ineligible		x	x	x			✓	
D-32	1912 4th Ave.	old Annex Theatre	1924	B	Ineligible		x	x				✓	
D-33	1900-1910 4th Ave.	Centennial Building	1904	A	Eligible		x	x				✓	
D-34	414 Olive Way	Times Square Building	1916	A (WHR, SL)	Listed							✓	
D-35	5th Ave, Westlake Ave., Olive Way, and Stewart St.	McGraw Square		A (SL)	Ineligible						x	✓	
D-36	1630 4th Ave.	Mayflower Park Hotel	1927	B	Eligible	C						✓	
D-37	1904 3rd Ave.	Securities Building	1925	A	Eligible	B,C	x			x		✓	
D-38	300 Stewart St.	Bon Marche	1929	A (SL)	Eligible	C						✓	
D-39	1907 3rd Ave.	Bergman's Luggage	1916	B	Ineligible		x	x				✓	
D-40	1900 2nd Ave.	Josephinum Hotel	1907	A (SL, WHR)	Listed							✓	

1/14/16

Seattle Center-Downtown Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration				Lack of Historical Significance	Yes	No	
							Windows	Doors	Siding	Porch				Additions
D-41	112 Stewart St.	St. Regis Hotel	1908	C	Ineligible	x	x					✓		
D-42	125 Stewart St.	Caffe D'Arte	1914	B	Eligible	C						✓		
D-43	1601 1st Ave.	Inn at the Market	unknown	A (PPHD)	Modern									
D-44	101 1st Ave.	Atwood Hotel	1909	B	Ineligible		x	x				✓		
D-45	1601 2nd Ave.	Schoenfield Building	1908	B	Ineligible		x	x	x					
D-46	1532 Pike Pl.	Triangle Market	unknown	A (PPHD)	Listed							✓		
D-47	1535 1st Ave.	First and Pine Building		A (PPHD)	Listed							✓		
D-48	111 1st Ave.	The Gatewood	1900	B	Ineligible	x	x					✓		
D-49	1527 2nd Ave.	Doyle Building	1919	A (SL)	Listed							✓		
D-50	211 Pine St.	Haight Building (2nd and Pike Building)	1910	A	Eligible	C	x	x				✓		
D-51	217 Pine St.	United Shopping Tower/Olympic Tower	1929?	A (WHR, SL)	Listed							✓		
D-52	1521 2nd Ave.	Green Tortoise Hostel	1909	B	Ineligible		x	x	x			✓		
D-53	1516 2nd Ave.	Columbia Building	1906	C	Ineligible		x	x	x			✓		
D-54	Northwest Corner of 1st Ave. and Pike St.	Corner Market		A (PPHD)	Listed							✓		
D-55	1500 1st Ave.	Seattle's Best Coffee	1922	C	Ineligible		x	x	x			✓		
D-56	114 Pike St.	Liberty Jewelry and Loan	1924	B	Ineligible		x	x	x			✓		
D-57	1511 2nd Ave.	Eitel Building	1904	A	Ineligible		x	x				✓		
D-58	212 Pike St.	Melbourne Tower	1904	B	Ineligible		x	x	x			✓		
D-59	Southwest Corner of 1st Ave. and Pike St.	Economy Market		A (PPHD)	Listed		x					✓		

Seattle Center-Downtown Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration				Lack of Historical Significance	Yes	No	
							Windows	Doors	Siding	Porch				Additions
D-60	103 Pike St.	Hahn Building	1910	C	Ineligible		x	x					✓	
D-61	215 Pike St.	Bangmi Smokeshop	1924	C	Ineligible		x	x					✓	
		Museum Plaza												
D-62	1321 2nd Ave.	Building (Arthur Denny Homesite)	1926	C, WHR	Ineligible								✓	
D-63	1209 2nd Ave.	Galland Building	1903	C	Ineligible		x	x					✓	
D-64	1201 2nd Ave.	Hadfield Building	1890	A (SL)	Eligible								✓	
D-65	1205 2nd Ave.	Seneca Building	1900	B	Ineligible		x	x					✓	
D-66	1100 2nd Ave.	Baillargeon Building	1906	A	Eligible								✓	
D-67	1015 2nd Ave.	Federal Reserve Bank Building	1950	B	Eligible	A and C							✓	
D-68	821 1st Ave.	Exchange Building	1929	A (SL)	Eligible	C							✓	
D-69	815 2nd Ave.	Puget Sound Bank (Bank of California)	1924	A (SL)	Eligible	C							✓	
D-70	820 1st Ave.	Marion Building	?	C	Ineligible		x	x					✓	
D-71	814 2nd Ave.	814 Second Ave. Building	1907	B	Ineligible		x	x					✓	
D-72	804 2nd Ave.	Seattle Trust and Savings Bank	1906	A	Eligible								✓	
		Hong Kong and Shanghai Banking Corporation Clock											✓	
D-73	720 2nd Ave.	Foster and Marshall Building	1921	A (SL)	Eligible								✓	
D-74	720 2nd Ave.	Chamber of Commerce Building	1924	A	Eligible								✓	
D-75	215 Columbia St.	Metsker Maps	1903	A (PS)	Listed	A and C							✓	
D-76	700 1st Ave.												✓	

I / 7 E / 9

Seattle Center-Downtown Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission					Concurrence	
							Alteration				Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions		
D-77	705 2nd Ave.	Hoge Building (Carson Boren Home Site)	1911	A (WHR, SL)	Listed NR							✓	
D-78	710 2nd Ave.	Dexter Horton Building	1922	A (SL)	Eligible	B						✓	
D-79	605 1st Ave.	Mutual Life Building	?	A (PSPD)	Listed	A and C						✓	
D-80	107 Cherry	Lowman Building	1906	A (PSPD)	Listed	A and C						✓	
D-81	619 2nd Ave.	Seattle's Best Coffee	1900	A (PSPD)	Listed	A and C						✓	
D-82	618 2nd Ave.	Alaska Building	1904	A (PSPD)	Listed	A and C						✓	
D-83	213 Cherry St.	Grand Opera House	1898	B	Ineligible		x			x		✓	
D-84	619 3rd Ave.	Unknown	?	C	Ineligible		x	x	x				
D-85	606 1st Ave.	Pioneer Square Mall	1900	A (PSPD)	Listed	A and C						✓	
D-86	601 2nd Ave.	Butler Garage	?	A (PSPD)	Listed	A and C							
D-87	610 2nd Ave.	Unknown	1900	A (PSPD)	Listed	A and C							
D-88	600 2nd Ave.	Hartford Building	1929	A (PSPD)	Listed	A and C							
D-89	601 3rd Ave.	Lyon Building	1910	A (SL)	Eligible	C						✓	
D-90	93 Yesler Way	Café Paloma		A (PSPD)	Listed	A and C							
D-91	99 Yesler Way	Tully's Coffee		A (PSPD)	Listed	A and C							
D-92	520 2nd Ave.	Collins Building	1900	A (PSPD)	Listed	A and C							
D-93	519 3rd Ave.	Unknown	1900	A (PSPD)	Listed	A and C							
D-94	512 2nd Ave.	Unknown	1920	A (PSPD)	Listed	A and C							
D-95	502 2nd Ave.	Smith Tower	1912	A (PSPD)	Listed	A and C							
D-96	109 Yesler Way	Merchant's Café		A (PSPD)	Listed	A and C							
D-97	115 Yesler Way	Bohemian Nightclub		A (PSPD)	Listed	A and C							
D-98	102 Yesler Way	Flanagan and Lane	1900	A (PSPD)	Listed	A and C							
D-99	423 2nd Ave. Ext. S.	Metropole Market	1900	A (PSPD)	Listed	A and C							





Seattle Center-Downtown Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions			
D-100	201 Yesler Way	Unknown	1900	A (PSPD)	Listed	A and C								
D-101	223 Yesler Way	Frye Apartments	1908	A (PSPD)	Listed	A and C								
D-102	408 2nd Ave. Ext. S.	Unknown	1909	A (PSPD)	Listed	A and C								
D-103	411 2nd Ave. Ext. S.	Unknown	1900	A (PSPD)	Listed	A and C								
D-104	410 2nd Ave. Ext. S.	Unknown	1900	A (PSPD)	Listed	A and C								
D-105	124 S. Washington St.	The Last Supper Club	?	A (PSPD)	Listed	A and C								
D-106	401 2nd Ave. Ext. S.	Unknown	1900	A (PSPD)	Listed	A and C								
D-107	406 2nd Ave. Ext. S.	Unknown	1909	A (PSPD)	Listed	A and C								
D-108	400 2nd Ave. Ext. S.	Unknown	1900	A (PSPD)	Listed	A and C								
D-109	165 S. Washington St.	Unknown	1900	A (PSPD)	Listed	A and C								
D-110	173 S. Washington St.	McCoys Firehouse	1900	A (PSPD)	Listed	A and C								
D-111	201 S. Washington St.	Unknown	1905	A (PSPD)	Listed	A and C								
D-112	211 S. Washington St.	Union Gospel Mission	1936	A (PSPD)	Listed	A and C								
D-113	219 S. Washington St.	Mathews and Chesnin Attorneys	?	A (PSPD)	Listed	A and C								
D-114	221 S. Washington St.	Union Gospel Mission	1900	A (PSPD)	Listed	A and C								
D-115	313 2nd Ave. Ext. S.	Unknown	1905	A (PSPD)	Listed	A and C								
D-116	208 2nd Ave. Ext. S.	Unknown	1904	A (PSPD)	Listed	A and C								
D-117	220 S. Main St.	Masins Fine Furniture	1900	A (PSPD)	Listed	A and C								
D-118	222 S. Main St.	Comedy Underground	1900	A (PSPD)	Listed	A and C								
D-119	220 3rd Ave.	Seattle Fire Department Fire Prevention	1905	A (PSPD)	Listed	A and C								
D-120	213 S. Main St.	Unknown	1900	A (PSPD)	Listed	A and C								
D-121	222 S. Main St.	Unknown	1906	A (PSPD)	Listed	A and C								

Seattle Center-Downtown Historical Properties Summary Table

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Historical Significance		
							Windows	Doors	Siding	Porch	Additions		Yes	No
D-122	307 2nd Ave. Ext. S.	James Harris Gallery	1906	A (PSPD)	Listed	A and C								
D-123	210 2nd Ave. Ext. S.	Seattle Lighting Fixture Co.	1946	A (PSPD)	Listed	A and C								
D-124	208 S. Jackson St.	Vacant	1900	A (PSPD)	Listed	A and C								
D-125	315 S. Jackson St.	Leathers/Gourmet Sausage Co.	1902	A (PSPD)	Listed	A and C								
D-126	301 S. Jackson St.	King Street Station	1906	A (PSPD)	Listed	A and C								



STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
(Mailing Address) PO Box 48343 • Olympia, Washington 98504-8343
Phone (360) 586-3065 FAX (360) 586-3067 Web Site: www.oahp.wa.gov

June 10, 2003

Ms. Kimberly Demeuth
Senior Consultant
Entrix, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121

RECEIVED

JUN 13 2003

ENTRIX seattle

In future correspondence please refer to:

Log: 061003-08-USCG

Property: Seattle Monorail - Interbay

Re: Determination of Eligibility for the National Register of Historic Places

Dear Ms. Demeuth:

Thank you for contacting the Washington State Office of Archaeology and Historic Preservation (OAHP). The above referenced properties have been reviewed on behalf of the State Historic Preservation Officer under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. My review is based upon documentation contained in your communication.

I concur that 29 properties are NOT ELIGIBLE for the National Register of Historic Places. Six properties are eligible, which includes I-73 and I-74. We understand we will receive more information for I-19, I-52, I-66, I-80, and I-84.

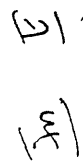
Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Allyson Brooks, Ph.D
State Historic Preservation Officer
(360) 586-3066
AllysonB@cted.wa.gov

Final Interbay Segment Historical Properties Summary Table for SEPA Review.xls

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission					Concurrence	
							Alteration					Yes	No
							Windows	Doors	Siding	Porch	Additions		
I-1A	Fisherman's Terminal	Bakketun and Thomas Boat Company Wood Construction and Repair		B	Ineligible		x					✓	
I-1B	Fisherman's Terminal	Seattle Ship Supply	1918	B	Ineligible		x	x	x			✓	
I-1C	Fisherman's Terminal	Residence and Storage	1916	B	Eligible	A						✓	
I-1D	Fisherman's Terminal	Storage		C	Ineligible						x	✓	
I-2	3635 Thorndyke Ave. W.	Rowan Event Services	1948	C	Ineligible						x	✓	
I-3	3615 Thorndyke Ave. W.	Richute Read Products Inc.	1945	C	Ineligible						x	✓	
I-4	3443a Thorndyke Ave. W.	Commercial Building	1946	B	Ineligible						x	✓	
I-5	3450 15th Ave. W.	Residence	1913	C	Ineligible		x	x	x	x		✓	
I-6	3448 15th Ave. W.	Residence	1914	C	Ineligible		x	x		x		✓	
I-7	3442 15th Ave. W.	Residence	1911	B	Ineligible						x	✓	
I-8	3440 15th Ave. W.	Residence	1911	B	Ineligible						x	✓	
I-9	1616 Bertona St.	Residence	1943	C	Ineligible						x	✓	
I-10	3418 15th Ave. W.	Residence	1914	C	Ineligible						x	✓	
I-11	3416 15th Ave. W.	Residence	1914	B	Ineligible						x	✓	
I-12	3402 15th Ave. W.	Residence	1929	B	Ineligible						x	✓	
I-13	3232 15th Ave. W.	Residence	1908	C	Ineligible		x	x	x	x		✓	


 15

Final Interbay Segment Historical Properties Summary Table for SEPA Review.xls

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission					Concurrence	
							Alteration				Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions		
I-14	3226 15th Ave. W.	Residence	1912	C	Ineligible		x		x		x	✓	
I-15	3218 15th Ave. W.	Residence	1948	B	Ineligible							✓	
I-16	3206 16th Ave. W.	State Farm Insurance	1935	B	Ineligible		x	x		x		✓	
I-17	3208 15th Ave. W.	Residence	1926	C	Ineligible							✓	
I-18	3200 15th Ave. W.	Commercial Building	1921	C	Ineligible							✓	
I-19	1414 W. Dravus St.	Residence	1914	B	Ineligible		x		x			✓	✓
I-20	3053 16th Ave. W.	Residence	1901	C	Ineligible		x	x	x			✓	
I-21	3048 16th Ave. W.	Residence	1901	C	Ineligible		x	x	x			✓	
I-22	3049 16th Ave. W.	Residence	1904	C	Ineligible		x	x	x			✓	
I-23	3041 16th Ave. W.	Residence	1902	C	Ineligible		x	x	x			✓	
I-24	3042 15th Ave. W.	Residence	1906	C	Ineligible				x			✓	
I-25	3036 16th Ave. W.	Residence	1907	B	Eligible	C						✓	
I-26	3032 16th Ave. W.	Residence	1910	B	Ineligible		x		x			✓	
I-27	3020 16th Ave. W.	Residence	1939	B	Ineligible		x			x		✓	
I-28	2816 15th Ave. W.	Residence	1900	B	Ineligible		x	x				✓	
I-29	2810 15th Ave. W.	Residence	1922	B	Ineligible		x	x				✓	

12/1
 E-1
 + 1-19

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions			
I-30	2800 15th Ave. W.	Four Seasons Cleaners	1947	C	Ineligible							x	☒	
I-31	2648 15th Ave. W.	A-1 Self Storage	1915	C	Ineligible							x	☒	
I-32	2626 15th Ave. W.	New York Fashion Academy	1945	C	Ineligible							x	☒	
I-33	2600a 15th Ave. W.	Accucraft Collision Center	1921	C	Ineligible							x	☒	
I-34	2600b 15th Ave. W.	Accucraft Collision Center Office	1915	B	Ineligible							x	☒	
I-35	2544 15th Ave. W.	Residence	1919	C	Ineligible							x	☒	
I-36	2542 15th Ave. W.	Residence	1919	C	Ineligible		x			x			☒	
I-37	2512 15th Ave. W.	Residence	1902	B	Ineligible		x		x				☒	
I-38	1600a W. Armory Way	Commercial Building	1942	B	Ineligible		x	x	x				☒	
I-39	2258 15th Ave. W.	Residence	1902	C	Ineligible							x	☒	
I-40	2254 15th Ave. W.	Residence	1900	C	Ineligible				x				☒	
I-41	2252 15th Ave. W.	Residence	1910	C	Ineligible		x				x		☒	
I-42	2250 15th Ave. W.	Residence	1905	C	Ineligible		x	x	x	x			☒	
I-43	2246 15th Ave. W.	Residence	1906	C	Ineligible				x				☒	
I-44	2246 1/2 15th Ave. W.	Residence	1906	C	Ineligible							x	☒	

15

Final Interbay Segment Historical Properties Summary Table for SEPA Review.xls

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions			
I-45	2244 15th Ave. W.	Residence	1918	C	Ineligible		x						✓	
I-46	2233 15th Ave. W.	Wood Parking Structure	1908	C	Ineligible							x	✓	
I-47	2232 15th Ave. W.	Sports X	1914	C	Ineligible							x	✓	
I-48	1600b W. Armory Way	Commercial Building	1942	C	Ineligible							x	✓	
I-49	2042 15th Ave. W.	Elliot Bay Animal Hospital	1903	C	Ineligible							x	✓	
I-50	1907 15th Ave. W.	Commercial Building	1947	B	Ineligible		x	x	x		x		✓	
I-51	1827 15th Ave. W.	UtilitiKilts	1947	C	Ineligible							x	✓	
I-52	1641a 15th Ave. W.	Tsubota Steel and Pipe	1917	B	Ineligible			x	x					✓
I-53	1641b 15th Ave. W.	Tsubota Steel and Pipe	1922	C	Ineligible							x	✓	
I-54	1641c 15th Ave. W.	Tsubota Steel and Pipe	1922	C	Ineligible							x	✓	
I-55	1634 15th Ave. W.	E-Z Mini Storage	1912	B	Ineligible		x	x	x				✓	
I-56	1630 15th Ave. W.	Ruud Paint Co.	1928	C	Ineligible							x	✓	
I-57	1602a 15th Ave. W.	Spy Connection	1947	C	Ineligible							x	✓	
I-58	1602b 15th Ave. W.	Commercial Building	1947	C	Ineligible							x	✓	
I-59	1415 West Garfield St.	Storage for Lighthouse Uniform Co.	1940	C	Ineligible							x	✓	

W
14

Final Interbay Segment Historical Properties Summary Table for SEPA Review.xls

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission					Concurrence	
							Alteration					Yes	No
							Windows	Doors	Siding	Porch	Additions		
I-60	1401 West Garfield St.	Bedrock	1932	C	Ineligible							✓	
I-61	1524 Elliott Ave. W.	L & R Building	1934	C	Ineligible		x	x	x			✓	
I-62	1516 Elliott Ave. W.	Builder's Hardware & Supply	1949	C	Ineligible							✓	
I-63	1515 Elliott Ave. W.	Turner & Pease Company	1946	C	Ineligible							✓	
I-64	1470 Elliott Ave. W.	Albert Lee Appliance	1906	C	Ineligible							✓	
I-65	1465 Elliott Ave. W.	Sound Imports Distributing Corporation	1937	C	Ineligible							✓	
I-66	1450 15th Ave. W.	Leibold Communications Inc.	1930	B	Ineligible						x		✓
I-67	1441-1445 Elliott Ave. W.	Little Secrets	1937	C	Ineligible							✓	
I-68	1435 Elliott Ave. W.	Chef Shop	1941	C	Ineligible							✓	
I-69	1436 Elliott Ave. W.	DGM Controls	1940	C	Ineligible							✓	
I-70	1425 Elliott Ave. W.	Ex Officio	1941	C	Ineligible							✓	
I-71	1405 Elliott Ave. W.	Vacant Building	1931	C	Ineligible							✓	
I-72	1123a Elliott Ave. W.	Ace Tank	1945	B	Eligible	A						✓	
I-73	1123b Elliott Ave. W.	Ace Tank	1945	C	Ineligible		x	x	x			✓	
I-74	1123c Elliott Ave. W.	Ace Tank	1945	C	Ineligible		x	x	x		x	✓	
I-75	1111 Elliott Ave. W.	Gardico	1950	B	Ineligible								✓

12 12 12
E 7 12
Jen 2

26008
30111

Final Interbay Segment Historical Properties Summary Table for SEPA Review.xls

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission						Concurrence	
							Alteration					Lack of Historical Significance	Yes	No
							Windows	Doors	Siding	Porch	Additions			
I-76	1110a Elliott Ave. W.	Queen Anne Upholstery	1944	C	Ineligible							x	✓	
I-77	1110b Elliott Ave. W.	Queen Anne Upholstery	1944	C	Ineligible							x	✓	
I-78	1110c Elliott Ave. W.	Queen Anne Upholstery	1944	C	Ineligible							x	✓	
I-79	1003 Prospect St.	Residence	1931	C	Ineligible							x	✓	
I-80	1038 Elliott Ave. W.	Wilson Machine Works	1925	B	Ineligible		x				x		✓	
I-81	1039a Elliott Ave. W.	Blackstock Lumber	1938	B	Ineligible		x		x		x		✓	
I-82	1039b Elliott Ave. W.	Blackstock Lumber	1937	B	Ineligible				x				✓	
I-83	1030 Elliott Ave. W.	Kollmar Sheet Metal	1939	C	Ineligible							x	✓	
I-84	945 Elliott Ave. W.	Contract Hardware	1953	B	Ineligible							x		
I-85	934a Elliott Ave. W.	Commercial Building	1935	C	Ineligible		x	x	x				✓	
I-86	934b Elliott Ave. W.	Phillips Scale Co.	1948, 1929	B	Eligible	C							✓	
I-87	934c Elliott Ave. W.	Phillips Scale Co.	1935	C	Ineligible							x	✓	
I-88	904a Elliott Ave. W.	City Team Ministries	1931	C	Ineligible		x	x					✓	
I-89	904b Elliott Ave. W.	City Team Ministries	1931	C	Ineligible							x	✓	
I-90	901 Elliott Ave. W.	Prestige Leather	1924	C	Ineligible							x	✓	
I-91	635 Elliott Ave. W.	West Farm Foods	1944	B	Ineligible		x				x		✓	

1/3 E/N

Final Interbay Segment Historical Properties Summary Table for SEPA Review.xls

Inv. No.	Building Address	Building Name	Date of Construction	Field Category Status	NRHP Status	NRHP Criteria	Reason for Omission					Concurrence	
							Alteration					Yes	No
							Windows	Doors	Siding	Porch	Additions		
I-92	652 Elliott Ave. W.	Tool Time	1944	C	Ineligible						x	☒	☐
I-93	648 Elliott Ave. W.	Taylor Brake Service	1946	C	Ineligible						x	☒	☐
I-94	630 Elliott Ave. W.	Shell Station	1946	C	Ineligible						x	☒	☐
I-95	544 Elliott Ave. W.	Chen's Village	1936	B	Ineligible						x	☒	☐
I-96	423 W. Republican St.	Apartment Building	1950	C	Ineligible						x	☒	☐

576

	Shaded properties would be demolished
--	---------------------------------------

ENTRIX

Since 1984 - Environmental Excellence

ENTRIX, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121
(206) 269-0104
(206) 269-0098 Fax

June 11, 2003

Allyson Brooks, Ph.D
State Historic Preservation Officer
Office of Archaeology & Historic Preservation
1063 S. Capital Way, Suite 106
Olympia, Washington 98501

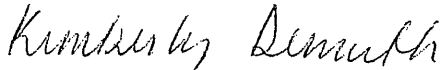
Re: Seattle Monorail Project Historic Resource Review

Dear Ms. Brooks:

In response to your review of ENTRIX's submittals of documentation regarding the historical significance of buildings and structures located within the Seattle Monorail Project (Project) Area of Potential Effect, I am providing you with additional information for the specific properties you noted in your letters of April 28, May 14, June 3, and June 10, 2003. The enclosed materials have been prepared to address your requests for additional information for historic resources located within the Ballard, Interbay, Seattle Center, Downtown, SODO, and West Seattle segments of the Project.

Please accept the enclosed property summary sheets and supporting historical documentation for specific properties as replacement pages for each relevant property. If you have any questions regarding the enclosed materials, please contact me at the telephone number listed above.

Sincerely,



Kimberly Demuth
Architectural Historian

Enclosures

Cc Helene Kornblatt, Seattle Monorail Project
John Perlic, Parametrix
Karen Gordon, Seattle Department of Neighborhoods
Michael Sullivan, Artifacts Consulting, Inc.

L L L L
L L L L
L L L L
L L L L



RECEIVED

JUN 16 2003

STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT **ENTRIX** **seattle**
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501

(Mailing Address) PO Box 48343 • Olympia, Washington 98504-8343

Phone (360) 586-3065 FAX (360) 586-3067 Web Site: www.oahp.wa.gov

June 12, 2003

Ms. Kimberly Demeuth
Entrix
2701 First Avenue, Suite 300
Seattle, WA 98121

In future correspondence please refer to:

Log: 061203-12-USCG

Property: Seattle Monorail

Re: Determination of Eligibility for the National Register of Historic Places

Dear Ms. Demeuth:

Thank you for contacting the Washington State Office of Archaeology and Historic Preservation (OAHP). The following properties have been reviewed on behalf of the State Historic Preservation Officer under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. My review is based upon documentation contained in your communication.

We concur that the following properties are ELIGIBLE for the National Register of Historic Places: the Seattle Space Needle, the International Fountain, B-132, WS-13, WS-14, WS-82, WS-116, WS-117, WS-129, WS-148, WS-151, S-26, S-58, D-1, D-23, D-42, D-57, D-58, D-84, D-89, SC-22, I-19, I-52, I-66, I-72, I-73, I-74, I-98. We concur the following properties are NOT ELIGIBLE for the National Register of Historic Places: WS-53, WS-41, WS-101, WS-104, WS-115, WS-105, WS-146, WS-137, WS-41, S-40, S-32, D-20, D-9, D-8, D-24, D-29, D-27, D-45, D-62, SC-23, I-80, I-84, B-16, B-17, I-97, B-14, B-15, B-116, B-137, SC-19, and SC-12.

Thank you for the opportunity to review and comment. Should you have any questions please feel free to contact me.

Sincerely,

Allyson Brooks, Ph.D

State Historic Preservation Officer

(360) 586-3066

AllysonB@cted.wa.gov





RECEIVED

AUG 11 2003

STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
(Mailing Address) PO Box 48343 • Olympia, Washington 98504-8343
Phone (360) 586-3065 FAX (360) 586-3067 Web Site: www.oahp.wa.gov

August 7, 2003

Ms. Kimberly Demeuth
Senior Consultant
Entrix, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121

In future correspondence please refer to:

Log: 080703-14-USCG

Property: Seattle Monorail - NHRP eligibility of areaways

Re: Determination of Eligibility for the National Register of Historic Places

Dear Ms. Demeuth:

Thank you for contacting the Washington State Office of Archaeology and Historic Preservation (OAHP). The above referenced property has been reviewed on behalf of the State Historic Preservation Officer under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. My review is based upon documentation contained in your communication.

Research indicates that the above referenced property is not currently listed in the Washington Heritage Register or National Register of Historic Places. I concur that the referenced property is ELIGIBLE for the National Register of Historic Places under criterion A. If additional information on the property becomes available, or if any archaeological resources are uncovered during construction, please halt work in the area of discovery and contact the appropriate Native American Tribes and OAHP for further consultation.

Thank you for the opportunity to review and comment. Should you have any questions please feel free to contact me.

Sincerely,

Allyson Brooks, Ph.D
State Historic Preservation Officer
(360) 586-3066
AllysonB@cted.wa.gov





STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
(Mailing Address) PO Box 48343 • Olympia, Washington 98504-8343
Phone (360) 586-3065 FAX (360) 586-3067 Web Site: www.oahp.wa.gov

RECEIVED

AUG 11 2003

ENTRIX seattle

August 7, 2003

Ms. Kimberly Demeuth
Senior Consultant
Entrix, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121

In future correspondence please refer to:

Log: 080703-18-USCG
Property: Seattle Monorail
Re: Seattle Monorail APE

Dear Ms. Demeuth:

We have reviewed the materials forwarded to our office for the above referenced project. Thank you for your description of the area of potential effect for the project. We concur with the definition of the APE. We look forward to the results of your cultural resources survey efforts, your consultation with the concerned tribes, and receiving the survey report. We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4) and the survey report when it is available.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Should additional information become available, our assessment may be revised.

Sincerely,

Allyson Brooks, Ph.D
State Historic Preservation Officer
(360) 586-3066
AllysonB@cted.wa.gov



RECEIVED

AUG 11 2003

STATE OF WASHINGTON
OFFICE OF COMMUNITY DEVELOPMENT
OFFICE OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
(Mailing Address) PO Box 48343 • Olympia, Washington 98504-8343
Phone (360) 586-3065 FAX (360) 586-3067 Web Site: www.oahp.wa.gov

ENTRIX seal

August 7, 2003

Ms. Kimberly Demeuth
Senior Consultant
Entrix, Inc.
2701 First Avenue, Suite 500
Seattle, WA 98121

In future correspondence please refer to:

Log: 080703-23-USCG

Property: Seattle Monorail Sinking Ship Areaway

Re: Determination of Eligibility for the National Register of Historic Places

Dear Ms. Demeuth:

Thank you for contacting the Washington State Office of Archaeology and Historic Preservation (OAHP). The above referenced property has been reviewed on behalf of the State Historic Preservation Officer under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. My review is based upon documentation contained in your communication.

Research indicates that the above referenced property is not currently listed in the Washington Heritage Register or National Register of Historic Places. I concur that the referenced property is NOT ELIGIBLE for the National Register of Historic Places under criterion D. However, if additional information on the property becomes available, or if any archaeological resources are uncovered during construction, please halt work in the area of discovery and contact the appropriate Native American Tribes and OAHP for further consultation.

Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

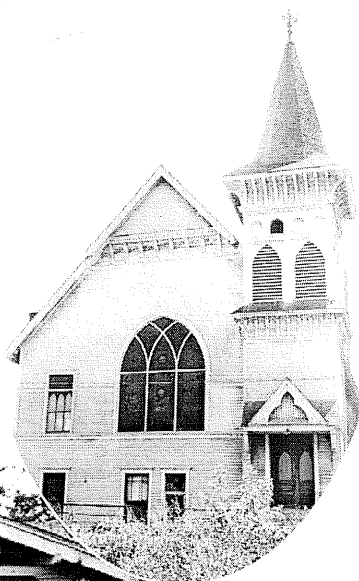
Sincerely,

Allyson Brooks, Ph.D
State Historic Preservation Officer
(360) 586-3066
AllysonB@cted.wa.gov



Appendix 2
Historical Resource Inventory Forms for Significant Buildings and Structures
(To be included in Washington OAHP database)

Washington's Statewide Historic Property Inventory Guide *and Database User Manual*



- **A Guide to the New Statewide Inventory Database**
- **How to Complete the Historic Property Inventory Form**
- **Helpful Hints**

Chapter 1: Introduction

Historic property inventory forms are arguably the most important tool used by the Office of Archaeology and Historic Preservation (OAHP), historic preservation consultants, local historic preservation commissions, planning departments, and researchers. The inventory is the basic building block of much of the work that happens at OAHP, from determinations of eligibility for the National Register of Historic Places to Section 106 review of potential adverse affects to historic properties. OAHP's collection of inventory forms totals more than 50,000 documents – all currently housed in multiple file cabinets in the OAHP office.

Several years ago, the City of Everett developed a Microsoft Access database to track historic property inventory data, ever after known as the "Everett database". The Everett database was used in several Washington cities and counties, but as local staff worked with the product, difficulties with the database arose. In an effort to generate a reliable and usable database product, OAHP hired professional consultants in 2001 to develop a historic property inventory database that would suit the needs of local governments while at the same time address the state's interest in creating a statewide reference tool. The completion of the database takes OAHP into a new era of technology and information accessibility. From this time forward, OAHP will collect data from local governments and others using the Statewide Historic Property Inventory Database and make it available to the public in an electronic format.

Software Specifications and Equipment Required for the Database

The statewide database requires Microsoft Access 2000 to run. In order to transport large data files back to OAHP, a "cd burner" with which to create data cds for import to the statewide database will also be required. Scanning software and equipment and/or a digital camera will also be needed in order to link images to the database.

How to Use this Guide

"Washington's Statewide Inventory Database Guide" is designed to walk the surveyor through the process of setting up the database, entering data into each field on the inventory form, as well as what is expected to be entered in each field. "Chapter 2: Loading the Database" guides the user through the initial set up process of the database. "Chapter 3: Introducing the Database" gives the user an illustrated guide showing each "screen" or view of the database. "Chapter 4: Entering Data" addresses the actual data entry process. It walks the user through each field, what is expected to be entered in the field, as well as the correct parameters for the data in each field. "Chapter 5: Entering Multiple Resource Sites" explains the process for data entry of resources with several buildings on one property. "Chapter 6: Filtering" explains how to search the database for specific properties or property types. "Chapter 7: Printing Records" guides the user through printing individual records as well as printing summary information. "Chapter 8: Sharing Database Information" explains the process for delivering completed inventory information to OAHP. The Appendix includes the new Field Survey Form; the "Lists" appendix to the field form; and an in-depth description of the Study Unit Themes.

How to Request the Database

The statewide database will be available free of charge from the Office of Archaeology and Historic Preservation. Please contact the Survey and Inventory Program Manager at 360/586-3074 to request a copy of the database.

Appendix 3
Historic Resource Inventory Table and Maps Showing Historic Resources Inventoried
(Category A, B and C Resources)

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
<i>*The areaways north of the Pioneer Square Historic District (except for D-128 and D-129) are not included on this Table. For a listing of these areaways see Appendix NN-5</i>		
Ballard		
B-1	8729 15th Avenue NW	Fire Station
B-2	8721 15th Avenue NW	Crown Cleaners
B-3	8720 16th Avenue NW	Residence
B-4	8716 16th Avenue NW	Residence
B-5	8714 16th Avenue NW	Residence
B-6	8708 16th Avenue NW	Residence
B-7	1520 87th Avenue NW	Warehouse
B-8	8701 15th Avenue NW	RadioShack
B-9	8541 15th Avenue NW	Bakery
B-10	8511 15th Avenue NW	Goofy's Sports Bar
B-11	8339a 15th Avenue NW	Washington Karate Assoc.
B-12	8339b 15th Avenue NW	Allstate Insurance
B-13	8339c 15th Avenue NW	Residence
B-14	8348 16th Avenue NW	Residence
B-15	8344 16th Avenue NW	Residence
B-16	8340 16th Avenue NW	Residence
B-17	8336 16th Avenue NW	Residence
B-18	8327 15th Avenue NW	Pizza Time
B-19	8323 15th Avenue NW	Residence
B-20	8037 15th Avenue NW	McGarth's Restaurant
B-21	8026a 15th Avenue NW	Residence
B-22	8026b 15th Avenue NW	Men & Women Salon and Spa
B-23	8023 15th Avenue NW	Residence
B-24	8022 15th Avenue NW	Residence
B-25	8017 15th Avenue NW	Residence
B-26	8015 15th Avenue NW	Law Office
B-27	8006 1/2 15th Avenue NW	Commercial Bldg
B-28	8006 15th Avenue NW	Family Dentistry
B-29	8000 15th Avenue NW	Bogart, Bremmer & Bradley Antiques
B-30	7757 15th Avenue NW	Crown Hill Hardware
B-31	7756 15th Avenue NW	Ridlow All Breed Dog Grooming
B-32	7750 15th Avenue NW	Love Zone
B-33	7749 15th Avenue NW	Commercial Bldg
B-34	7749 1/2 15th Avenue NW	Storage Bldg
B-35	7743 15th Avenue NW	Residence
B-36	7737 15th Avenue NW	Residence
B-37	7735 15th Avenue NW	Residence
B-38	7729 15th Avenue NW	Residence
B-39	7726 15th Avenue NW	Plasma Center
B-40	7725 15th Avenue NW	Residence
B-41	7720 15th Avenue NW	Residence
B-42	7719 15th Avenue NW	Leather Grafters Supply
B-43	7716 15th Avenue NW	Lucca
B-44	7709 15th Avenue NW	Residence

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
B-45	7705 15th Avenue NW	Archies Plumbing Service
B-46	7555 15th Avenue NW	Commercial Bldg
B-47	7551a 15th Avenue NW	Residence
B-48	7551b 15th Avenue NW	Commercial Bldg
B-49	7549 15th Avenue NW	Residence
B-50	7545 15th Avenue NW	Residence
B-51	7542 15th Avenue NW	Residence
B-52	7543 15th Avenue NW	Residence
B-53	7536 15th Avenue NW	Residence
B-54	7523 15th Avenue NW	Residence
B-55	7518 15th Avenue NW	Residence
B-56	7515 15th Avenue NW	15th Ave. Bar & Grill
B-57	7514 15th Avenue NW	Commercial Bldg
B-58	7509 15th Avenue NW	The Sands Plaza
B-59	7358 15th Avenue NW	Hair Studio
B-60	7353 15th Avenue NW	Residence
B-61	7346 15th Avenue NW	Residence
B-62	7335 15th Avenue NW	Apartments
B-63	7342 15th Avenue NW	Residence
B-64	7334a 15th Avenue Nw	Residence
B-65	7334b 15th Avenue NW	Arts Café
B-66	7330 15th Avenue NW	Unknown
B-67	7329 15th Avenue NW	Apartments
B-68	7324 15th Avenue NW	Bonnies Hair Design
B-69	7325 15th Avenue NW	Residence
B-70	7320 15th Avenue NW	Residence
B-71	7310 15th Avenue NW	Commercial Bldg
B-72	7302 15th Avenue NW	A & D Smoke Shop
B-73	7303 15th Avenue NW	Enterprise Car Rental
B-74	1487 73rd Street NW	Dive Commercial International
B-75	7056 15th Avenue NW	Apartments
B-76	7052 15th Avenue Nw	Residence
B-77	7048 15th Avenue NW	Residence
B-78	7044 15th Avenue NW	Residence
B-79	7039 15th Avenue NW	Residence
B-80	7034 15th Avenue NW	Waterwheel
B-81	7030 15th Avenue NW	Commercial Bldg
B-82	7027 15th Avenue NW	Residence
B-83	7023a 15th Avenue NW	Residence
B-84	7023b 15th Avenue NW	Unknown
B-85	7017 15th Avenue NW	O'hara Corporation
B-86	7016a 15th Avenue NW	Residence
B-87	7016b 15th Avenue NW	George W. Johnson Realtor, Insurance
B-88	7011 15th Avenue NW	Ballard Refinishers
B-89	7000 15th Avenue NW	Nancy's Salon, Pacific Tax
B-90	6754 15th Avenue NW	Lawnmower Sharpening and Repair
B-91	6759 15th Avenue NW	Shell Gas Station

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
B-92	6750 15th Avenue NW	Residence
B-93	6746 15th Avenue NW	Residence
B-94	6747 15th Avenue NW	Commercial Bldg
B-95	6742 15th Avenue NW	Residence
B-96	6743 15th Avenue NW	Residence
B-97	6738 15th Avenue NW	Residence
B-98	6739 15th Avenue NW	Residence
B-99	6732 15th Avenue NW	Residence
B-100	6733 15th Avenue NW	Residence
B-101	6722 15th Avenue NW	City Nails
B-102	6720 15th Avenue NW	Transmission Headquarters
B-103	6700 15th Avenue NW	Shotwell Chiropractic
B-104	6557 15th Avenue NW	Residence
B-105	6543 15th Avenue NW	Residence
B-106	6501 15th Avenue NW	Top Bannana Produce Stand
B-107	6416 15th Avenue NW	Zestos
B-108	6210 15th Avenue NW	Commercial Bldg
B-109	6201 15th Avenue NW	Apartments
B-110	1506 NW 62nd Street	Residence
B-111	1506 NW 61st Street	Residence
B-112	6015 15th Avenue NW	Restaurant
B-113	1508 NW 60th Street	Residence
B-114	1505 NW 60th Street	Apartments
B-115	5905 15th Avenue NW	Restaurant
B-116	1501 NW 59th Street	Barber Shop
B-117	1509 NW 59th Street	Residence
B-118	1502 NW 57th Street	Salmon Bay Tackle
B-119	1506 NW 57th Street	Residence
B-120	1512 NW Market Street	Residence
B-121	1506 NW 52nd Street	Residence
B-122	5201 15th Avenue NW	Pelican Press
B-123	5220 15th Avenue NW	Schucks Auto Supply
B-124	5011 NW 51st Street	Mac's Upholstrey
B-125	4901 15th Avenue NW	Exhaust Specialists
B-126	1510 NW Leary Way	Maritime Pacific Pub
B-127	1514 NW Leary Way	Maritime Pacific Brewery
B-128	1520 NW Leary Way	Scott Galvanizing Co.
B-129	1515 NW Leary Way	Unknown
B-130	1510 NW Ballard Way	Ballard Ornamental
B-131	1447 NW Ballard Way	Mike's Chili Parlor
B-132	1526 NW 46th Street	Brekke Co. Steel Fabricators
B-133	1513 NW 46th Street	Mac's Upholstrey
B-134	4517 Shilshoe Ave. NW	Unknown
B-135	4531 Shilshoe Ave. NW	Unknown
B-136	4499-4501 Shilshoe Ave. NW (Building #1)	Mandrakes Antiques
B-137	4499-4501 Shilshoe Ave. NW (Building #2A)	Unknown

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
B-138	4499-4501 Shilshoe Ave. NW (Building #2B)	Unknown
B-139	4499-4501 Shilshoe Ave. NW (Building 3)	Ballard Bridge
B-140	Ballard Bridge	
Interbay/Magnolia		
I-1A	Fisherman's Terminal	Bakketun and Thomas Boat Company Wood Construction and Repair
I-1B	Fisherman's Terminal	Seattle Ship Supply
I-1C	Fisherman's Terminal	Residence and Storage
I-1D	Fisherman's Terminal	Storage
I-2	3635 Thorndyke Ave. W.	Rowan Event Services
I-3	3615 Thorndyke Ave. W.	Richute Read Products Inc.
I-4	3443a Thorndyke Ave. W.	Commercial Building
I-5	3450 15th Ave. W.	Residence
I-6	3448 15th Ave. W.	Residence
I-7	3442 15th Ave. W.	Residence
I-8	3440 15th Ave. W.	Residence
I-9	1616 Bertona St.	Residence
I-10	3418 15th Ave. W.	Residence
I-11	3416 15th Ave. W.	Residence
I-12	3402 15th Ave. W.	Residence
I-13	3232 15th Ave. W.	Residence
I-14	3226 15th Ave. W.	Residence
I-15	3218 15th Ave. W.	Residence
I-16	3206 16th Ave. W.	State Farm Insurance
I-17	3208 15th Ave. W.	Residence
I-18	3200 15th Ave. W.	Commercial Building
I-19	1414 W. Dravus St.	Residence
I-20	3053 16th Ave. W.	Residence
I-21	3048 16th Ave. W.	Residence
I-22	3049 16th Ave. W.	Residence
I-23	3041 16th Ave. W.	Residence
I-24	3042 15th Ave. W.	Residence
I-25	3036 16th Ave. W.	Residence
I-26	3032 16th Ave. W.	Residence
I-27	3020 16th Ave. W.	Residence
I-28	2816 15th Ave. W.	Residence
I-29	2810 15th Ave. W.	Residence
I-30	2800 15th Ave. W.	Four Seasons Cleaners
I-31	2648 15th Ave. W.	A-1 Self Storage
I-32	2626 15th Ave. W.	New York Fashion Academy
I-33	2600a 15th Ave. W.	Accucraft Collision Center
I-34	2600b 15th Ave. W.	Accucraft Collision Center Office
I-35	2544 15th Ave. W.	Residence
I-36	2542 15th Ave. W.	Residence
I-37	2512 15th Ave. W.	Residence
I-38	1600a W. Armory Way	Commercial Building

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
I-39	2258 15th Ave. W.	Residence
I-40	2254 15th Ave. W.	Residence
I-41	2252 15th Ave. W.	Residence
I-42	2250 15th Ave. W.	Residence
I-43	2246 15th Ave. W.	Residence
I-44	2246 1/2 15th Ave. W.	Residence
I-45	2244 15th Ave. W.	Residence
I-46	2233 15th Ave. W.	Wood Parking Structure
I-47	2232 15th Ave. W.	Sports X
I-48	1600b W. Armory Way	Commercial Building
I-49	2042 15th Ave. W.	Elliot Bay Animal Hospital
I-50	1907 15th Ave. W.	Commercial Building
I-51	1827 15th Ave. W.	Utilikilts
I-52	1641a 15th Ave. W.	Tsubota Steel and Pipe
I-53	1641b 15th Ave. W.	Tsubota Steel and Pipe
I-54	1641c 15th Ave. W.	Tsubota Steel and Pipe
I-55	1634 15th Ave. W.	E-Z Mini Storage
I-56	1630 15th Ave. W.	Ruud Paint Co.
I-57	1602a 15th Ave. W.	Spy Connection
I-58	1602b 15th Ave. W.	Commercial Building
I-59	1415 West Garfield St.	Storage for Lighthouse Uniform Co.
I-60	1401 West Garfield St.	Bedrock
I-61	1524 Elliott Ave. W.	L & R Building
I-62	1516 Elliott Ave. W.	Builder's Hardware & Supply
I-63	1515 Elliott Ave. W.	Turner & Pease Company
I-64	1470 Elliott Ave. W.	Albert Lee Appliance
I-65	1465 Elliott Ave. W.	Sound Imports Distributing Corporation
I-66	1450 15th Ave. W.	Leibold Communications Inc.
I-67	1441-1445 Elliott Ave. W.	Little Secrets
I-68	1435 Elliott Ave. W.	Chef Shop
I-69	1436 Elliott Ave. W.	DGM Controls
I-70	1425 Elliott Ave. W.	Ex Officio
I-71	1405 Elliott Ave. W.	Vacant Building
I-72	1123a Elliott Ave. W.	Ace Tank
I-73	1123b Elliott Ave. W.	Ace Tank
I-74	1123c Elliott Ave. W.	Ace Tank
I-75	1111 Elliott Ave. W.	Gardico
I-76	1110a Elliott Ave. W.	Queen Anne Upholstery
I-77	1110b Elliott Ave. W.	Queen Anne Upholstery
I-78	1110c Elliott Ave. W.	Queen Anne Upholstery
I-79	1003 Prospect St.	Residence
I-80	1038 Elliott Ave. W.	Wilson Machine Works
I-81	1039a Elliott Ave. W.	Blackstock Lumber
I-82	1039b Elliott Ave. W.	Blackstock Lumber
I-83	1030 Elliott Ave. W.	Kollmar Sheet Metal
I-84	945 Elliott Ave. W.	Contract Hardware
I-85	934a Elliott Ave. W.	Commercial Building

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
I-86	934b Elliott Ave. W.	Phillips Scale Co.
I-87	934c Elliott Ave. W.	Phillips Scale Co.
I-88	904a Elliott Ave. W.	City Team Ministries
I-89	904b Elliott Ave. W.	City Team Ministries
I-90	901 Elliott Ave. W.	Prestige Leather
I-91	635 Elliott Ave. W.	West Farm Foods
I-92	652 Elliott Ave. W.	Tool Time
I-93	648 Elliott Ave. W.	Taylor Brake Service
I-94	630 Elliott Ave. W.	Shell Station
I-95	544 Elliott Ave. W.	Chen's Village
I-96	423 W. Republican St.	Apartment Building
I-97	Magnolia Bridge	Magnolia Bridge Viaduct and Extension
I-98	W Armory Way	Burlington Northern Roundhouse and
I-99	1600 W Armory Way	Naval Supply Depot Building
Queen Anne/Seattle Center/Belltown		
SC-1	350 Elliott Av. W.	Shanty Café
SC-2	215 W. Harrison	Unknown
SC-3	325 W. Harrison	J. Wm. C. Building
SC-4	111 W. Harrison	Unknown
SC-5	333 W. Harrison	Unknown
SC-6	401 W. Harrison	Unknown
SC-7	7 Queen Anne Ave. N.	Unknown
SC-8	26 W. Harrison St.	Delmasse Apartments
SC-9	168 Denny Way	Allstate Insurance
SC-10	204 Denny Way	The Frol Building
SC-11	351 Denny Way	76 Gas Station
SC-12	325 Denny Way	Wells Fargo Bank
SC-13	505 1st Ave. N.	Queen Anne Apartments
SC-14	305 Harrison St.	Northwest Rooms
SC-15	305 Harrison St.	Center House
SC-16	Seattle Center	Monorail Terminal, Office, and Track
SC-17	125 Mercer St.	Coffee Zingaro
SC-18	150 Mercer St.	U-Park System
SC-19	170 Mercer St.	Peasley Ross & Co.
SC-20	605 5th Ave. N.	Auditorium Apartments
SC-21	500 Mercer St.	Tower Records
SC-22	Seattle Center	Memorial Stadium
SC-23	505 Harrison St.	Polly Esther's
SC-24	511 Harrison St. OUT OF APE	City Light Broad Street Substation
SC-25	206 5th Ave. N.	Zak's Saloon
SC-26	416 John St.	Unknown
SC-27	131 Taylor Ave. N.	Unknown
SC-28	118 5th Ave. N.	Seattle Electric Works (now vacant)
SC-29	112 5th Ave. N.	Office
SC-30	508 Denny Way	Fat City Motors
SC-31	305 Harrison St.	Space Needle

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
SC-32	305 Harrison St.	Seattle Center Fountain

Downtown/Pioneer Square		
D-1	419 Denny Way	Zeek's Pizza
D-2	5th Ave. Denny Way, and Cedar St.	Seattle, Chief of the Suquamish Statue
D-3	415 Cedar St.	Golden Singha Thai Cuisine
D-4	501 Denny Way	Cleaners
D-5	2619 5th Ave.	Unknown
D-6	2609 5th Ave.	Unknown
D-7	420 Vine St.	Davenport Apartments
D-8	500 Vine St.	Unknown
D-9	521 Wall St.	Unknown
D-10	2318 4th Ave.	Fire Station No. 2
D-11	2235 5th Ave.	American Games
D-12	2225 5th Ave.	Retail Store
D-13	2221 5th Ave.	Unknown
D-14	2218 5th Ave.	Unknown
D-15	2217 5th Ave.	Unknown
D-16	2211 5th Ave.	Unknown
D-17	420 Blanchard St.	Windham Apartments
D-18	2132 5th Ave.	5th Avenue Court Apartments
D-19	2127 5th Ave.	Unknown
D-20	2124 5th Ave.	Top Pot Doughnuts
D-21	2121 5th Ave.	Unknown
D-22	2115 5th Ave.	Unknown
D-23	2100 5th Ave.	Western Printing Co.
D-24	2030 5th Ave.	Jordon Building
D-25	2025 5th Ave.	Kirin Sushi
D-26	2011 5th Ave.	Sheridan Apartments
D-27	2005 5th Ave.	Griffin Building
D-28	1927 5th Ave.	Icon Grill
D-29	1923 5th Ave.	Ford Graphics
D-30	1921 5th Ave.	Nation
D-31	1913 5th Ave.	Avis
D-32	1912 4th Ave.	old Annex Theatre
D-33	1900-1910 4th Ave.	Centennial Building
D-34	414 Olive Way	Times Square Building
D-35	5th Ave, Westlake Ave., Olive Way, and Stewart St.	McGraw Square
D-36	1630 4th Ave.	Mayflower Park Hotel
D-37	1904 3rd Ave.	Securities Building
D-38	300 Stewart St.	Bon Marche
D-39	1907 3rd Ave.	Bergman's Luggage
D-40	1900 2nd Ave.	Josephinum Hotel
D-41	112 Stewart St.	St. Regis Hotel
D-42	125 Stewart St.	Caffe D'Arte
D-43	1601 1st Ave.	Inn at the Market

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
D-44	101 1st Ave.	Atwood Hotel
D-45	1601 2nd Ave.	Schoenfield Building
D-46	1532 Pike Pl.	Triangle Market
D-47	1535 1st Ave.	First and Pine Building
D-48	111 1st Ave.	The Gatewood
D-49	1527 2nd Ave.	Doyle Building
D-50	211 Pine St.	Haight Building (2nd and Pike Building)
D-51	217 Pine St.	United Shopping Tower/Olympic Tower
D-52	1521 2nd Ave.	Green Tortoise Hostel
D-53	1516 2nd Ave.	Columbia Building
D-54	Northwest Corner of 1st Ave. and Pike St.	Corner Market
D-55	1500 1st Ave.	Seattle's Best Coffee
D-56	114 Pike St.	Liberty Jewelry and Loan
D-57	1511 2nd Ave.	Eitel Building
D-58	212 Pike St.	Melbourne Tower
D-59	Southwest Corner of 1st Ave. and Pike St.	Economy Market
D-60	103 Pike St.	Hahn Building
D-61	215 Pike St.	Bangmi Smokeshop
D-62	1321 2nd Ave.	Museum Plaza Building (Arthur Denny Homesite)
D-63	1209 2nd Ave.	Galland Building
D-64	1201 2nd Ave.	Hadfield Building
D-65	1205 2nd Ave.	Seneca Building
D-66	1100 2nd Ave.	Baillargeon Building
D-67	1015 2nd Ave.	Federal Reserve Bank Building
D-68	821 1st Ave.	Exchange Building
D-69	815 2nd Ave.	Puget Sound Bank (Bank of California)
D-70	820 1st Ave.	Marion Building
D-71	814 2nd Ave.	814 Second Ave. Building
D-72	804 2nd Ave.	Seattle Trust and Savings Bank
D-73	720 2nd Ave.	Hong Kong and Shanghai Banking Corporation Clock
D-74	720 2nd Ave.	Foster and Marshall Building
D-75	215 Columbia St.	Chamber of Commerce Building
D-76	700 1st Ave.	Metsker Maps
D-77	705 2nd Ave.	Hoge Building (Carson Boren Home Site)
D-78	710 2nd Ave.	Dexter Horton Building
D-79	605 1st Ave.	Mutual Life Building
D-80	107 Cherry	Lowman Building
D-81	619 2nd Ave.	Broderick Building/Seattle Best Coffee
D-82	618 2nd Ave.	Alaska Building
D-83	213 Cherry St.	Grand Opera House
D-84	619 3rd Ave.	Unknown
D-85	606 1st Ave.	Pioneer Square Mall
D-86	601 2nd Ave.	Butler Garage

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
D-87	610 2nd Ave.	Unknown
D-88	600 2nd Ave.	Hartford Building
D-89	601 3rd Ave.	Lyon Building
D-90	93 Yesler Way	Café Paloma
D-91	99 Yesler Way	Tully's Coffee
D-92	520 2nd Ave.	Collins Building
D-93	519 3rd Ave.	Unknown
D-94	512 2nd Ave.	Unknown
D-95	502 2nd Ave.	Smith Tower
D-96	109 Yesler Way	Merchant's Café
D-97	115 Yesler Way	Bohemian Nightclub
D-98	102 Yesler Way	Flanagan and Lane
D-99	423 2nd Ave. Ext. S.	Metropole Market
D-100	201 Yesler Way	Unknown
D-101	223 Yesler Way	Frye Apartments
D-102	408 2nd Ave. Ext. S.	Unknown
D-103	411 2nd Ave. Ext. S.	Unknown
D-104	410 2nd Ave. Ext. S.	Unknown
D-105	124 S. Washington St.	The Last Supper Club
D-106	401 2nd Ave. Ext. S.	Unknown
D-107	406 2nd Ave. Ext. S.	Unknown
D-108	400 2nd Ave. Ext. S.	Unknown
D-109	165 S. Washington St.	Unknown
D-110	173 S. Washington St.	McCoys Firehouse
D-111	201 S. Washington St.	Unknown
D-112	211 S. Washington St.	Union Gospel Mission
D-113	219 S. Washington St.	Mathews and Chesnin Attorneys
D-114	221 S. Washington St.	Union Gospel Mission
D-115	313 2nd Ave. Ext. S.	Unknown
D-116	208 2nd Ave. Ext. S.	Unknown
D-117	220 S. Main St.	Masins Fine Furniture
D-118	222 S. Main St.	Comedy Underground
D-119	220 3rd Ave.	Seattle Fire Department Fire Prevention
D-120	213 S. Main St.	Unknown
D-121	222 S. Main St.	Unknown
D-122	307 2nd Ave. Ext. S.	James Harris Gallery
D-123	210 2nd Ave. Ext. S.	Seattle Lighting Fixture Co.
D-124	208 S. Jackson St.	Vacant
D-125	315 S. Jackson St.	Leathers/Gourmet Sausage Co.
D-126	301 S. Jackson St.	King Street Station
D-127	Pioneer Square Historic District Areaways	
D-127a	Sinking Ship Garage Areaway	Sinking Ship Garage Areaway
D-127b	601 2nd Ave.	Butler Garage Areaway
D-127c	619 2nd Ave.	Broderick Building Areaway
D-128	414 Olive Way	Times Square Building Areaway
D-129	1516 2nd Ave.	Columbia Building Areaway
D-130	1427 3rd Avenue	

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
D-131	Pike Place Public Market Historic District	
D-132	Pioneer Square Historic District	

SODO/Chinatown International District/Pioneer Square		
S-1	1731 4th Ave. S.	Metro Pacific Community credit Union
S-2	1741 4th Ave. S.	
S-3	Railroad Tracks between S. Holgate St. and S. Walker St.	Railroad Shelter
S-4	1943 4th Ave. S.	Drivelines NW
S-5	2215 4th Ave. S.	Ben's Cleaner Sales Inc.
S-6	2221 4th Ave. S.	Ben's Cleaner Sales Inc.
S-7	2227 4th Ave. S.	Animal Hospital
S-8	2250 Occidental Ave. S.	Distributor's Warehousing Co.
S-9	2400 1st Ave. S.	
S-10	2406 1st Ave. S.	
S-11	2418 1st Ave. S.	
S-12	2424 1st Ave. S.	
S-13	2440 1st Ave. S.	
S-14	2444 1st Ave. S.	
S-15	2450 1st Ave. S.	Unknown
S-16	2456 1st Ave. S.	Sherman Plumbing
S-17	2462 1st Ave. S.	Earthwise Building
S-18	76 S. Lander St.	Sears
S-19	2700 1st Ave. S.	Western Neon
S-20	85 S. Lander St.	Lemieux's
S-21	2710 1st Ave. S.	
S-22	2720 1st Ave. S.	
S-23	2724 1st Ave. S.	
S-24	2731 1st Ave. S.	
S-25	2737 1st Ave. S.	Moeller Design & Development
S-26	2764 1st Ave. S.	Bank of America
S-27	2909 1st Ave. S.	Ajax Electric/Malden Mills
S-28	2900 1st Ave. S.	Western Foil
S-29	2901 Utah Ave. S.	
S-30	2910 1st Ave. S.	
S-31	2915 Utah Ave. S.	
S-32	2915 1st Ave. S.	Industrial Pump Sales Company
S-33	2921 Utah Ave. S.	
S-34	2918 1st Ave. S.	Industrial Supply
S-35	2921 1st Ave. S.	
S-36	2925 1st Ave. S.	Ederer
S-37	2935 Utah Ave. S.	Washington Chain and Supply Co.
S-38	2936 Utah Ave. S.	
S-39	2936 Utah Ave. S. (Bldg. B)	
S-40	2931 1st Ave. S.	
S-41	2945 1st Ave. S.	

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
S-42	2959 Utah Ave. S.	
S-43	2951 1st Ave. S. (Bldg. A)	
S-44	2951 1st Ave. S. (Bldg. B)	
S-45	2944 1st Ave. S.	Gorlick's/Gorlich Mufflers
S-46	2963 Utah Ave. S.	
S-47	2963 1st Ave. S.	Dick's Restaurant Supply
S-48	2962 1st Ave. S.	
S-49	3201 Utah Ave. S.	Dong Vinh, Inc.
S-50	3201 1st Ave. S.	K.R. Trigger Building
S-51	3207 1st Ave. S.	Vertigo Building/Zephyr Communications
S-52	3200 1st Ave. S.	Andrews Brothers Building (Herban Patio)
S-53	3220 1st Ave. S.	Herban Pottery
S-54	3230 - 3228 1st Ave. S.	
S-55	SE corner of S. Horton St. and Colorado	PSF Industries, Inc.
S-56	65 S. Horton ST.	PSF Industries, Inc.
S-57	Building immediately East of 65 S. Horton	PSF Industries, Inc.
S-58	79 S. Horton St.	Markey
S-59	3301 1st Ave. S.	Western Steel
S-60	3225 E. Marginal Way S.	Rainier Cold Storage Buildings #1
S-61	SE corner of S. Horton St. and Colorado	Rainier Cold Storage Buildings A & B
West Seattle		
WS-1	3617 19th Ave. SW	Residence
WS-2	3704 20th Ave. SW	Residence
WS-3	4007 23rd Ave. SW	Residence
WS-4	2303 Andover St.	Residence
WS-5	3857 SW Andover St.	Residence
WS-6	3847 23rd Ave. SW	Residence
WS-7	3823 Delridge Way SW	Residence
WS-8	3830-3831 Delridge Way SW	Residence
WS-9	3838 Delridge Way SW	Residence
WS-10	3837 Delridge Way SW	Residence
WS-11	3850 Delridge Way SW	Residence
WS-12	3852 Delridge Way SW	Residence
WS-13	3860 Delridge Way SW	Seattle Style Salon
WS-14	2424 SW Andover St.	Nucor Steel Mill
WS-15	2623 SW Yancy St.	Residence
WS-16	2803 SW Yancy St.	Residence
WS-17	2805 SW Yancy St.	Residence
WS-18	2807 SW Yancy St.	Residence
WS-19	2811 SW Yancy St.	Residence
WS-20	2821 SW Yancy St.	Residence
WS-21	2827 SW Yancy St.	Residence
WS-22	2831 SW Yancy St.	Residence
WS-23	2835 SW Yancy St.	Residence
WS-24	2837 SW Yancy St.	Residence

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
WS-25	2841 SW Yancy St.	Residence
WS-26	2844 SW Dakota St.	Residence
WS-27	2851 SW Yancy St.	Residence
WS-28	2856 SW Dakota St.	Residence
WS-29	2853 SW Yancy St.	Residence
WS-30	3010 SW Avalon Way	Residence
WS-31	3014 SW Avalon Way	Residence
WS-32	3018 SW Avalon Way	Residence
WS-33	3036 SW Avalon Way	Residence
WS-34	3050 SW Avalon Way	Residence
WS-35	3062 SW Avalon Way	Residence
WS-36	3039 SW Avalon Way	Residence
WS-37	3051 SW Avalon Way	Residence
WS-38	3055 SW Avalon Way	Residence
WS-39	3104 SW Avalon Way	Residence
WS-40	3112 SW Avalon Way	Residence
WS-41	3247 SW Avalon Way	Residence
WS-42	3249 SW Avalon Way	Residence
WS-43	3253 SW Avalon Way	Residence
WS-44	3261 SW Avalon Way	Residence
WS-45	3275 SW Avalon Way	Residence
WS-46	3266 SW Avalon Way	Residence
WS-47	3279 SW Avalon Way	Residence
WS-48	3281 SW Avalon Way	Residence
WS-49	4433 35th Ave. SW	Tavern
WS-50	4445 35th Ave. SW	B & D Unfinished Furniture
WS-51	4501 35th Ave. SW	Garage for Residence
WS-52	4623 36th Ave. SW	Quality Auto Rebuild
WS-53	3612 SW Alaska St.	American Legion Hall
WS-54	3710 SW Alaska St.	Lien Animal Clinic
WS-55	4450 38th Ave. SW	Huiling Brother's Repair
WS-56	4406 36th Ave. SW	Alki Lumber
WS-57	4425 Fauntleroy Way SW	House of Kleen
WS-58	4421 Fauntleroy Way SW	Seattle Teriyaki
WS-59	4460 37th Ave. SW	West Seattle Radiator
WS-60	4500 Fauntleroy Way SW	Wardrobe Cleaners
WS-61	4450 Fauntleroy Way SW	West Seattle Brake Service
WS-62	4480 Fauntleroy Way SW	Diva Espresso
WS-63	4518 Fauntleroy Way SW	Bob Ochsner Cars
WS-64	3714 SW Oregon St.	Residence
WS-65	3718 SW Oregon St.	Residence
WS-66	4514 Fauntleroy Way SW	West Seattle Montessori
WS-67	4520 Fauntleroy Way SW	Fauntleroy Chiropractic Clinic
WS-68	4528 Fauntleroy Way SW	West Seattle Cleaners
WS-69	4501 38th AVE SW	Car Quest Auto Parts
WS-70	4545 Fauntleroy Way SW	Huiling Brother's Car Dealer
WS-71	3901 SW Alaska St.	Texaco

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
WS-72	3909 SW Alaska St.	Howden & Kennedy Funeral Home
WS-73	3922 SW Alaska St.	Schucks Auto Supply
WS-74	4100 SW Alaska St.	Hollywood Video
WS-75	NE Corner 42nd Ave. SW & SW Alaska St.	Unknown
WS-76	4201 SW Alaska St.	West Seattle Nails
WS-77	4729 42nd Ave. SW	Dentists Office
WS-78	4802 42nd Ave. SW	Residence
WS-79	4811 42nd Ave. SW	Residence
WS-80	4817 42nd Ave. SW	Residence
WS-81	4554 California Ave. SW	Cherry Creek Furniture
WS-82	4302 Alaska St.	Easy Street Records
WS-83	4700 California Ave. SW	Urban Fitness
WS-84	4702 California Ave. SW	Sound Advice
WS-85	4706-4712 California Ave. SW	Funky Janes Consignment
WS-86	4707 California Ave. SW	Mortons/Great Harvest
WS-87	4711 California Ave. SW	Arts West
WS-88	4718 California Ave. SW	Luck Joy
WS-89	4719 California Ave. SW	Taqueria Guaymas
WS-90	4721 [A] California Ave. SW	Husky Deli
WS-91	4721 [B] California Ave. SW	NW Art & Frame/Borracchini's Bakery
WS-92	4720 California Ave. SW	Elliott Bay Brewery
WS-93	4722 California Ave. SW	Dentists Office
WS-94	4724 California Ave. SW	Petco
WS-95	4736 California Ave. SW	Liberty Bell Printing
WS-96	4741 California Ave. SW	Sleepers in Seattle
WS-97	4740 California Ave. SW	Curious Kids Stuff
WS-98	4744 California Ave. SW	Coin Laundry
WS-99	4750 California Ave. SW	West Seattle Town Hall
WS-100	4752 California Ave. SW	Guppy's Bar
WS-101	4400 SW Alaska St.	Apartment
WS-102	4405 SW Alaska St.	Apartment
WS-103	4717 44th Ave. SW	Apartment
WS-104	4737 44th Ave. SW	Residence
WS-105	4741 44th Ave. SW	Residence
WS-106	4321 SW Edmunds St.	Residence
WS-107	4815 1/2 Erskine Way SW	Residence
WS-108	4815 Erskine Way SW	Residence
WS-109	4301 SW Edmunds St.	Skippers
WS-110	4215 California Ave. SW	Rhizomes
WS-111	4822 California Ave. SW	Bio-therapeutic
WS-113	5026 California Ave. SW	Residence
WS-114	5030 California Ave. SW	Residence
WS-115	5046-5048 California Ave. SW	West Seattle Licenses
WS-116	5202 California Ave. SW	Apartment
WS-117	5206 California Ave. SW	Apartment
WS-118	5245 California Ave. SW	Ephesus

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
WS-119	5247 California Ave. SW	Cav Vy's/Rick Barber Shop
WS-120	5232 California Ave. SW	Residence
WS-121	5269 California Ave. SW	Residence
WS-122	5401 California Ave. SW	Westside Pharmacy
WS-123	5405 California Ave. SW	Affirmations
WS-124	5409 California Ave. SW	Salon ef-fekts
WS-125	5416 California Ave. SW	Skin Sense
WS-126	5415 California Ave. SW	Vacant
WS-127	5426 California Ave. SW	Kennen-Meyer Architects
WS-128	5434 California Ave. SW	Residence
WS-129	5440 California Ave. SW	Residence
WS-130	5446 California Ave. SW	Residence
WS-131	5447 California Ave. SW	Randall Berg & Associates
WS-132	5458 California Ave. SW	Residence
WS-133	5612 California Ave. SW	C & P Coffee House
WS-134	5616 California Ave. SW	Residence
WS-135	5617 California Ave. SW	Seaview Chiropractic Clinic
WS-136	5622 California Ave. SW	Residence
WS-137	5619 California Ave. SW	Illusions Hair Designs
WS-138	5639 California Ave. SW	Sound Yoga
WS-139	5643 California Ave. SW	A Better Roofing
WS-140	5659 California Ave. SW	Seatellite Auto Glass
WS-141	5902 California Ave. SW	DeSautel Chiropractic Clinic
WS-142	5910 California Ave. SW	Hoops Unlimited
WS-143	5922 California Ave. SW	Farmers Insurance Group
WS-144	5923 California Ave. SW	Guadalajara
WS-145	5926 California Ave. SW	Residence
WS-146	5927 California Ave. SW	Residence
WS-147	5932 California Ave. SW	TRP Frameworks
WS-148	5933 California Ave. SW	Residence
WS-149	5936 California Ave. SW	Residence
WS-150	5940 California Ave. SW	Residence
WS-151	5948 California Ave. SW	Residence
WS-152	5949 California Ave. SW	Residence
WS-153	5952 California Ave. SW	Bug Masters
WS-154	5956-5958 California Ave. SW	Residence
WS-155	5957 California Ave. SW	Residence
WS-156	6007 California Ave. SW	Dentists Office
WS-157	6010 California Ave. SW	Residence
WS-158	6016 California Ave. SW	TV & Vaccum Repair
WS-159	6022 California Ave. SW	Pizza Time
WS-160	6022 1/2 California Ave. SW	Residence
WS-161	6021 California Ave. SW	Residence
WS-162	6026 California Ave. SW	West Seattle Cellars
WS-163	6026 1/2 California Ave. SW	Residence
WS-164	6031 California Ave. SW	Different Smoke Shop
WS-165	6031 1/2 California Ave. SW	Residence

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
WS-166	6030 California Ave. SW	Wahl & Co.
WS-167	6046 California Ave. SW	Community Play School
WS-168	6047 California Ave. SW	JD Johnson
WS-169	6048 California Ave. SW	Ken's Mane Barber Shop
WS-170	6056 California Ave. SW	O'neil the Plumber
WS-171	6055 California Ave. SW	Paint Your Wagon
WS-172	6053 California Ave. SW	Apartment
WS-173	6058 California Ave. SW	The Sub Shop
WS-174	6059 California Ave. SW	Agult's King Fu
WS-175	6301 California Ave. SW	Chuck and Sally's Tavern
WS-176	4321 SW Beveridge Pl..	Residence
WS-177	6400 California Ave. SW	Aaron's Bicycle Repair
WS-178	6451 California Ave. SW	Full Moon Saloon
WS-179	6459 California Ave. SW	Inn on the Corner
WS-180	4221 & 4225 SW Holly St.	Residence
WS-181	6708 California Ave. SW	Residence
WS-182	6703 California Ave. SW	Residence
WS-183	6711 California Ave. SW	Residence
WS-184	6715 California Ave. SW	Residence
WS-185	6719 & 6717 A/B California Ave. SW	Residence
WS-186	6721 California Ave. SW	Residence
WS-187	4408 Delridge Way	Cooper Elementary School
WS-188	2906 SW Avalon Way	Boysen Apartments
WS-189	2920 SW Avalon Way	Shack Coffee Shop
WS-191	2914 SW Avalon Way	Luna Park Café
WS-192	2988 SW Avalon Way	Residence
WS-190	4405 26th Street	Residence
WS-191	4022 Delridge Way	Residence
WS-193	4317 26th Street	Residence
WS-194	2612 Genesee Street	Residence
WS-195	4155 Delridge Way	Residence
WS-196	4151 Delridge Way	Residence
WS-197	4018 Delridge Way	Residence
WS-198	4117 Delridge Way	Residence
WS-199	2970 SW Avalon Way	Residence
WS-200	2940 SW Avalon Way	Luna Day Spa/Murphy's
WS-201	2938 SW Avalon Way	British Auto Center Ltd.
WS-202	2624 Genesee Street	Residence
WS-203	2518 Genesee Street	Residence
WS-204	2512 Genesee Street	Residence
WS-205	2414/2416 Genesee Street	Duplex
WS-206	4401 26th Street	Residence
WS-207	4130 25th Avenue	Residence
WS-208	4147 Delridge Way	Residence
WS-209	4131 Delridge Way	Residence
WS-210	4127 Delridge Way	Residence
WS-211	4123 Delridge Way	Residence
WS-212	4111 Delridge Way	Residence

Historic Resource Inventory Table By Segment

Inventory No.	Building Address	Building Name
WS-213	4134 Delridge Way	Residence
WS-214	4103 Delridge Way	Residence
WS-215	4101 Delridge Way	Residence
WS-216	4028 Delridge Way	Residence
WS-217	4030 Delridge Way	Residence
WS-218	4034 Delridge Way	Residence
WS-219	4050 Delridge Way	Residence
WS-220	3818 23rd Ave. SW	Residence
WS-221	3804 23rd Ave. SW	Residence
WS-222	3645 22nd Ave.	Residence
WS-223	3631 22nd Ave.	Residence
WS-224	3801 Delridge Way	Madison Café
WS-225	4405 26th Ave. SW	Residence
WS-226	4401 26th Ave. SW	Residence
WS-227	4130 25th Ave. SW	Residence

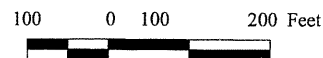


All Layers © City of Seattle

Historic Resources Study Ballard - Map 1



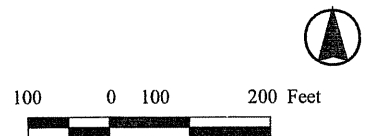
SEATTLE MONORAIL PROJECT

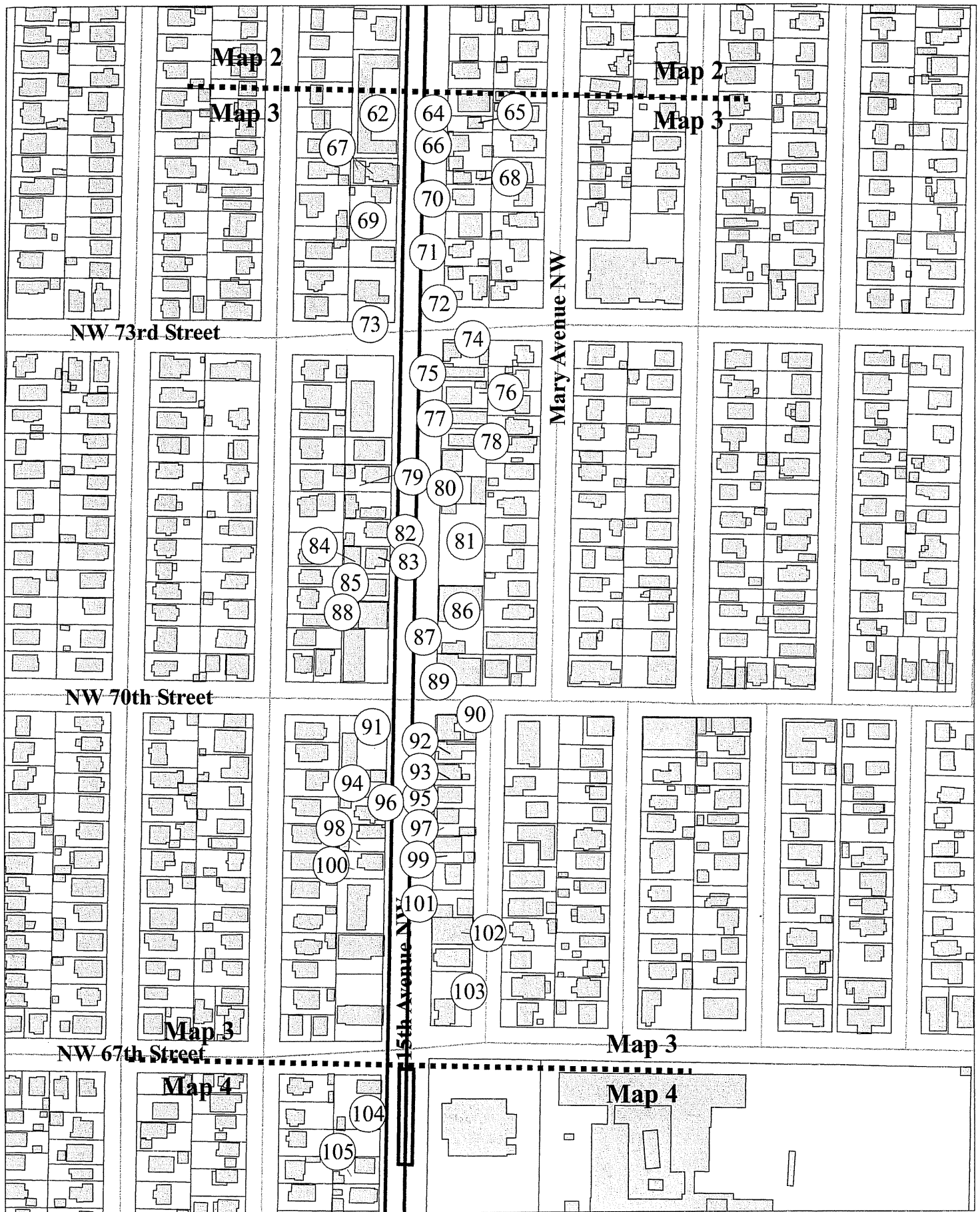




All Layers © City of Seattle

Historic Resources Study Ballard - Map 2



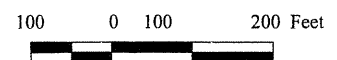


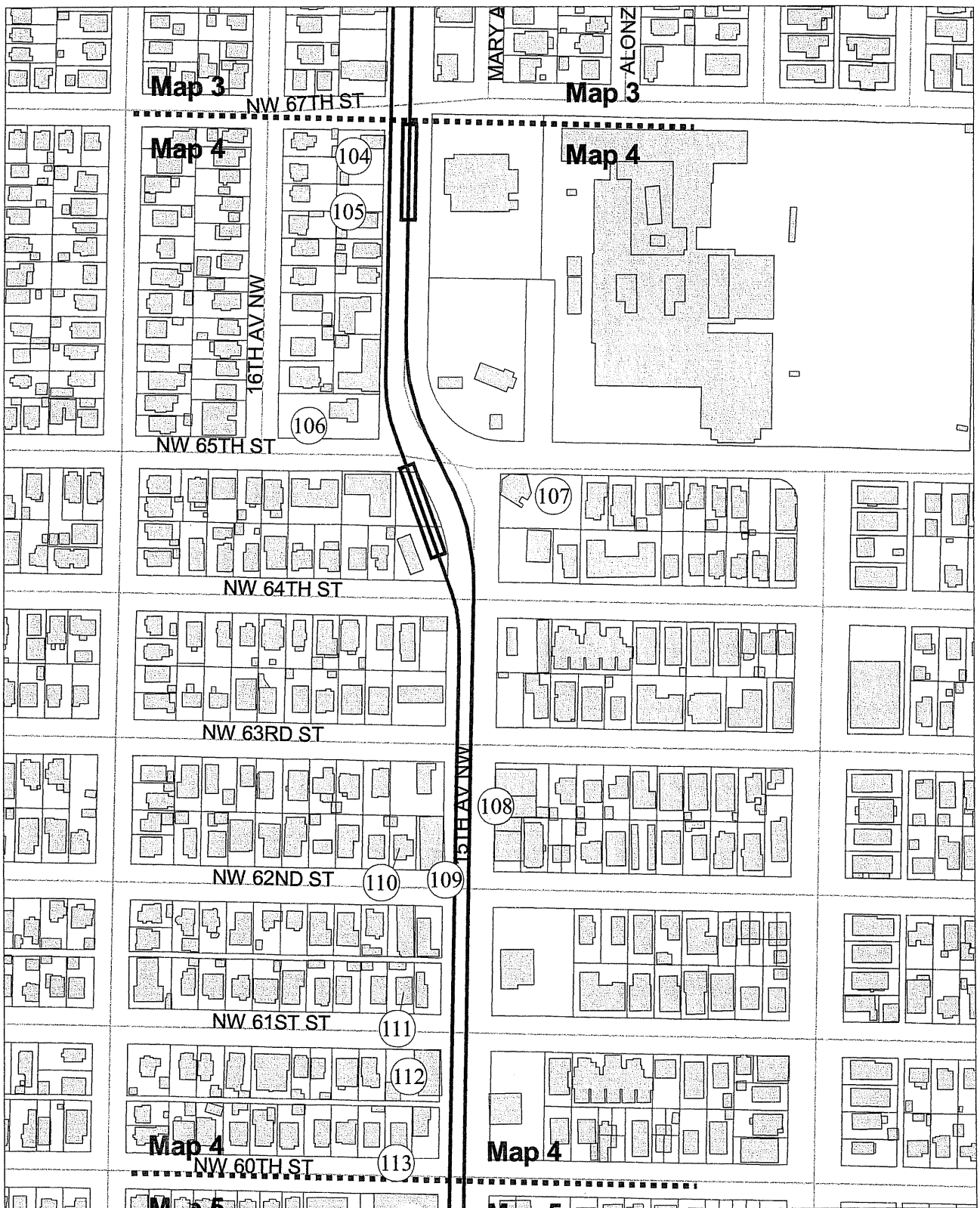
All Layers © City of Seattle

Historic Resources Study Ballard - Map 3



SEATTLE MONORAIL PROJECT

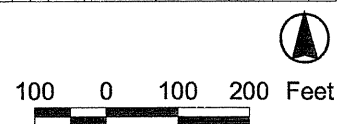


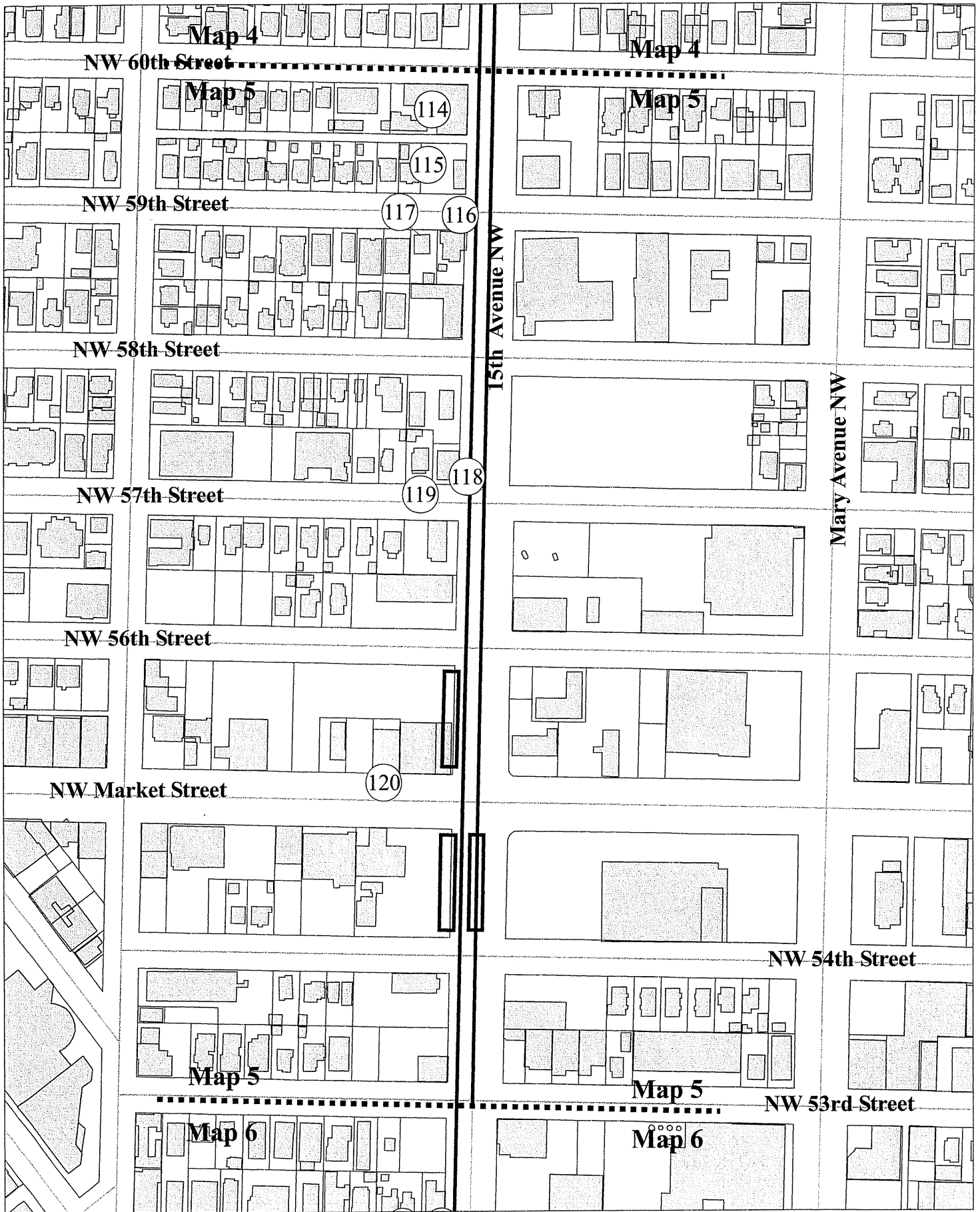


All Layers © 2000 City of Seattle

Historic Resources Study **Ballard - Map 4**

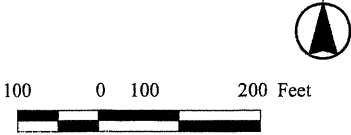
SEATTLE MONORAIL PROJECT

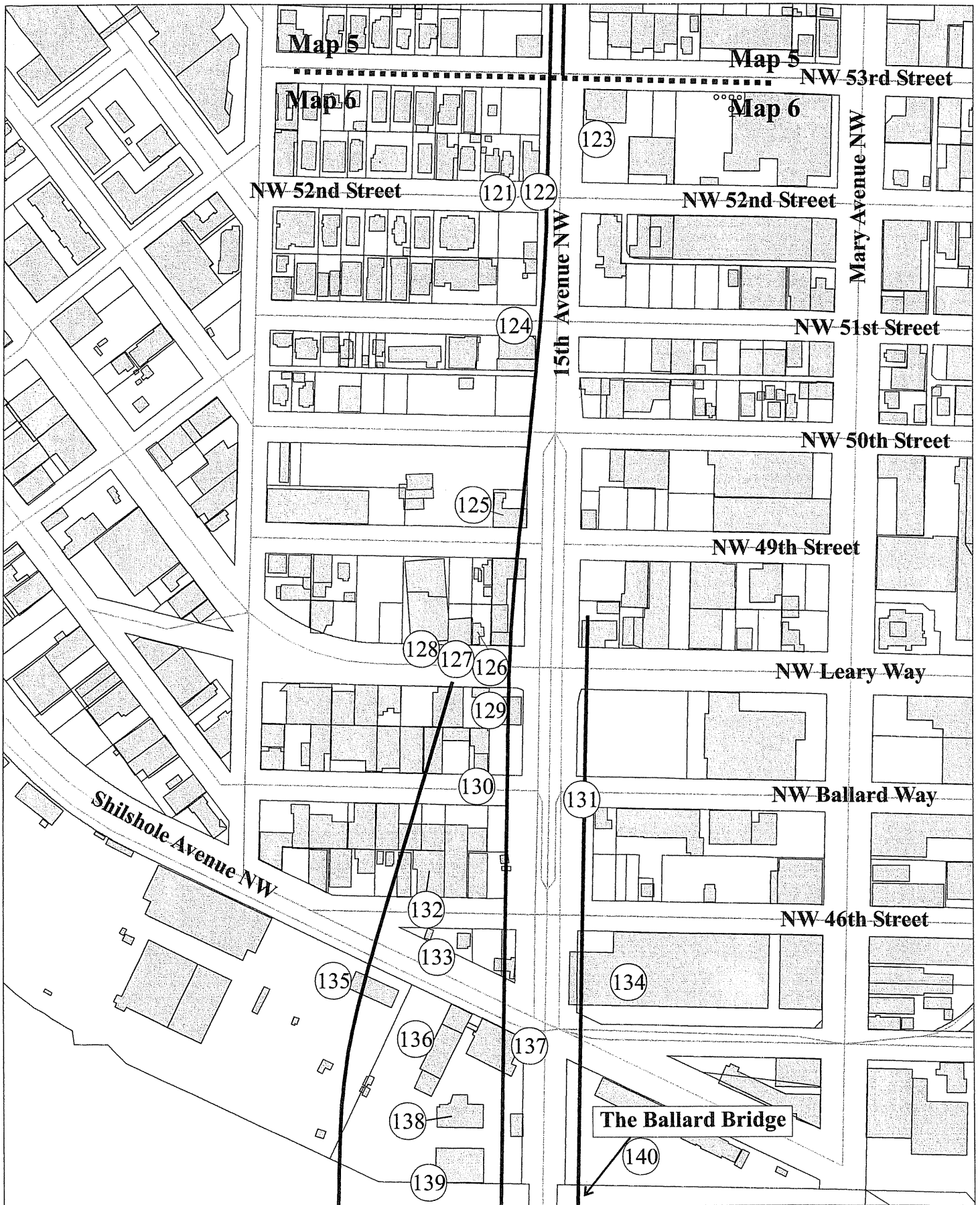




All Layers©City of Seattle

**Historic Resources Study
Ballard - Map 5**





All Layers © City of Seattle

Historic Resources Study **Ballard - Map 6**

SEATTLE MONORAIL PROJECT



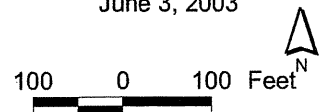


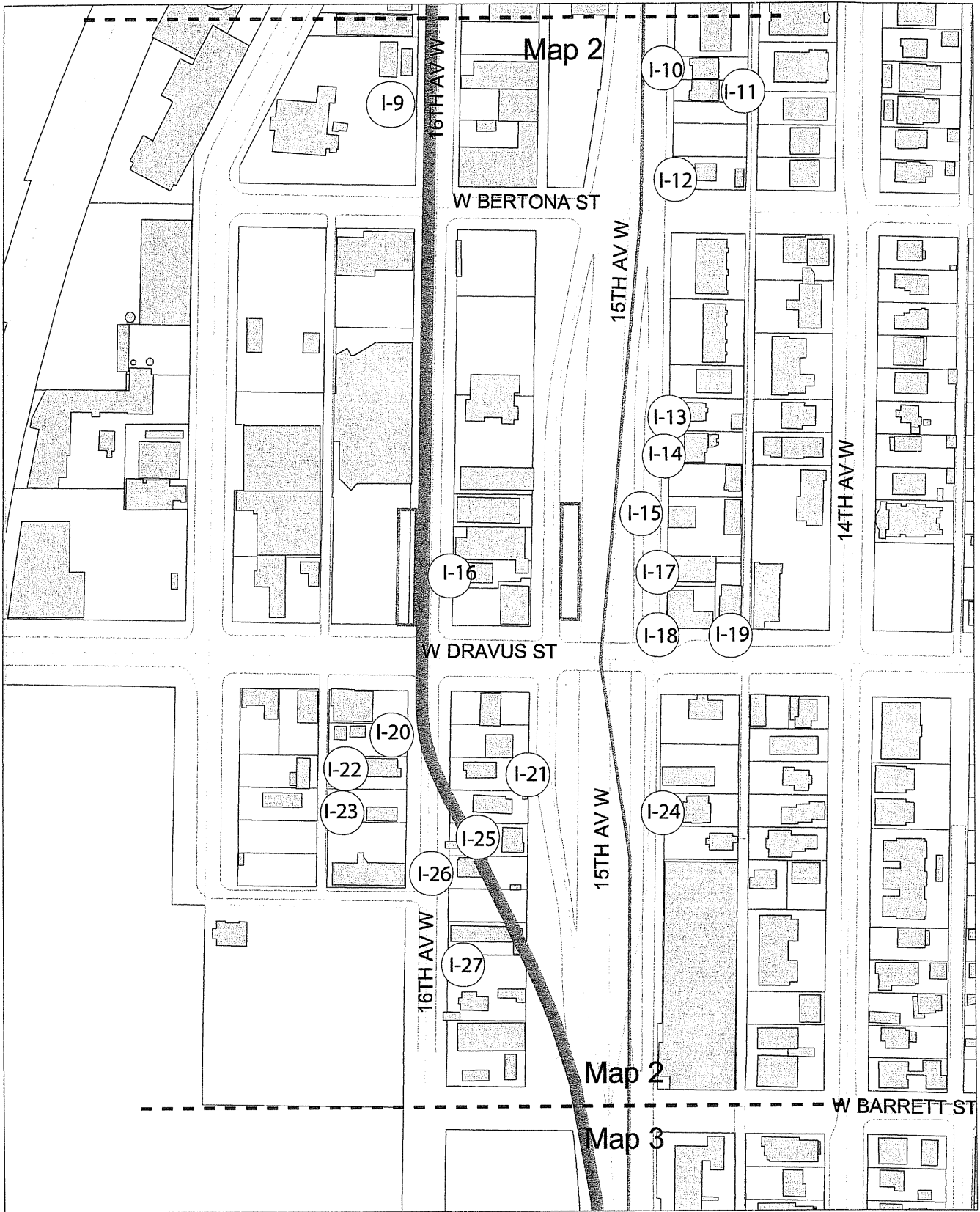
All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

Historic Resources Study Interbay - Map 1

June 3, 2003





All layers Copyright 2000
City of Seattle

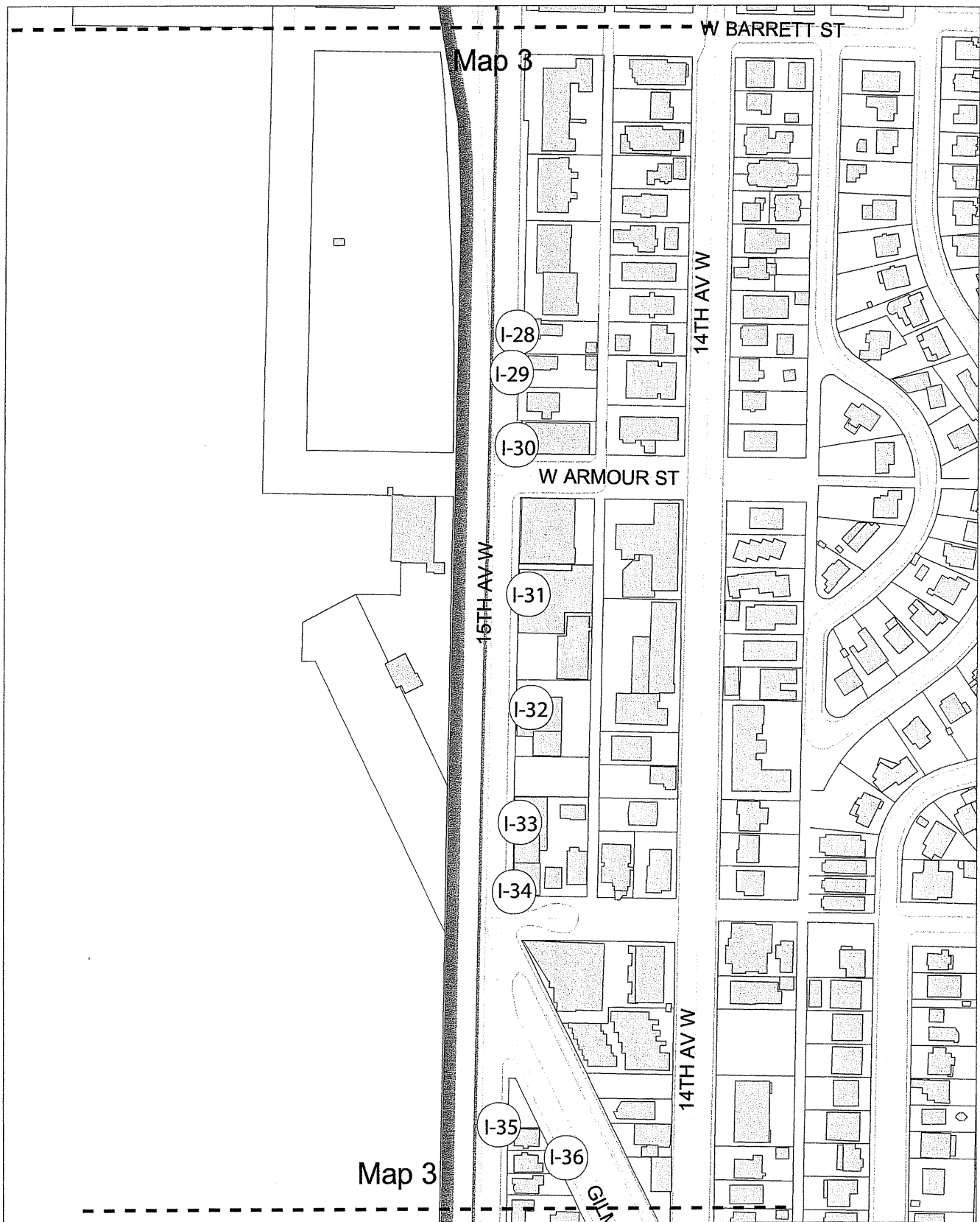
SEATTLE MONORAIL PROJECT

Historic Resources Study Interbay - Map 2

June 3, 2003



100 0 100 Feet



All layers Copyright 2000
City of Seattle

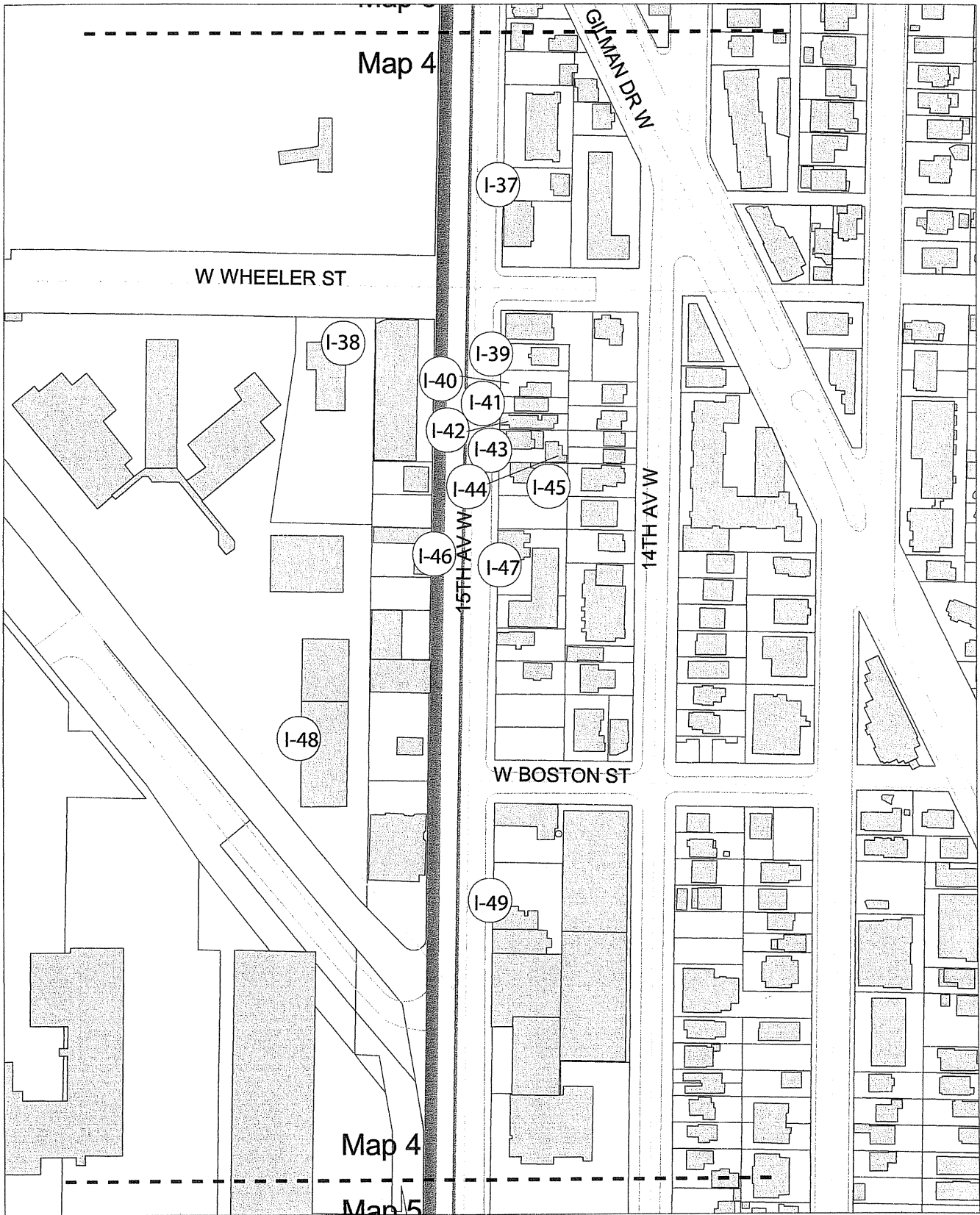
SEATTLE MONORAIL PROJECT

Historic Resources Study Interbay - Map 3

June 3, 2003



100 0 100 Feet



All layers Copyright 2000
City of Seattle

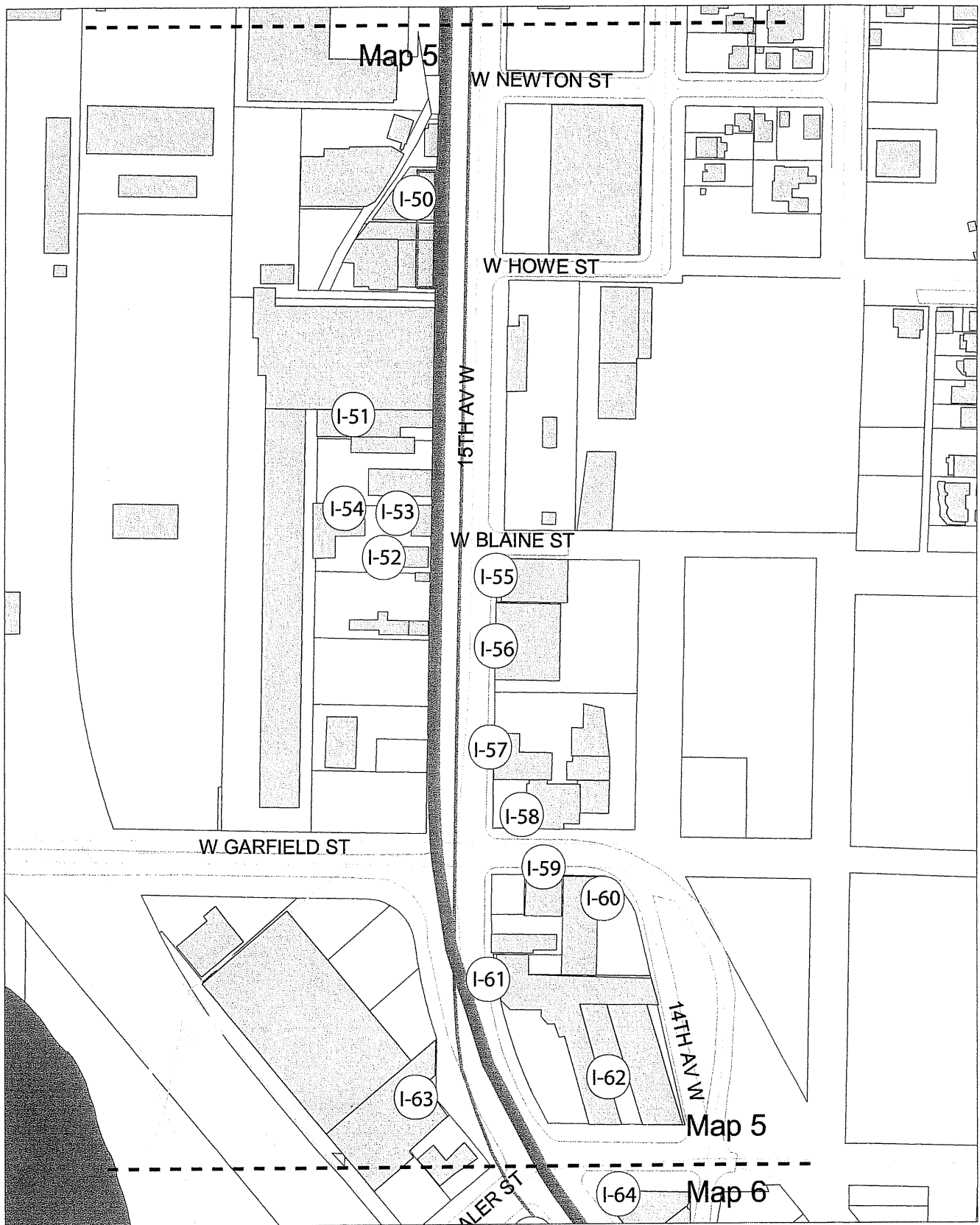
SEATTLE MONORAIL PROJECT

Historic Resources Study Interbay - Map 4

June 3, 2003



100 0 100 Feet



All layers Copyright 2000
City of Seattle

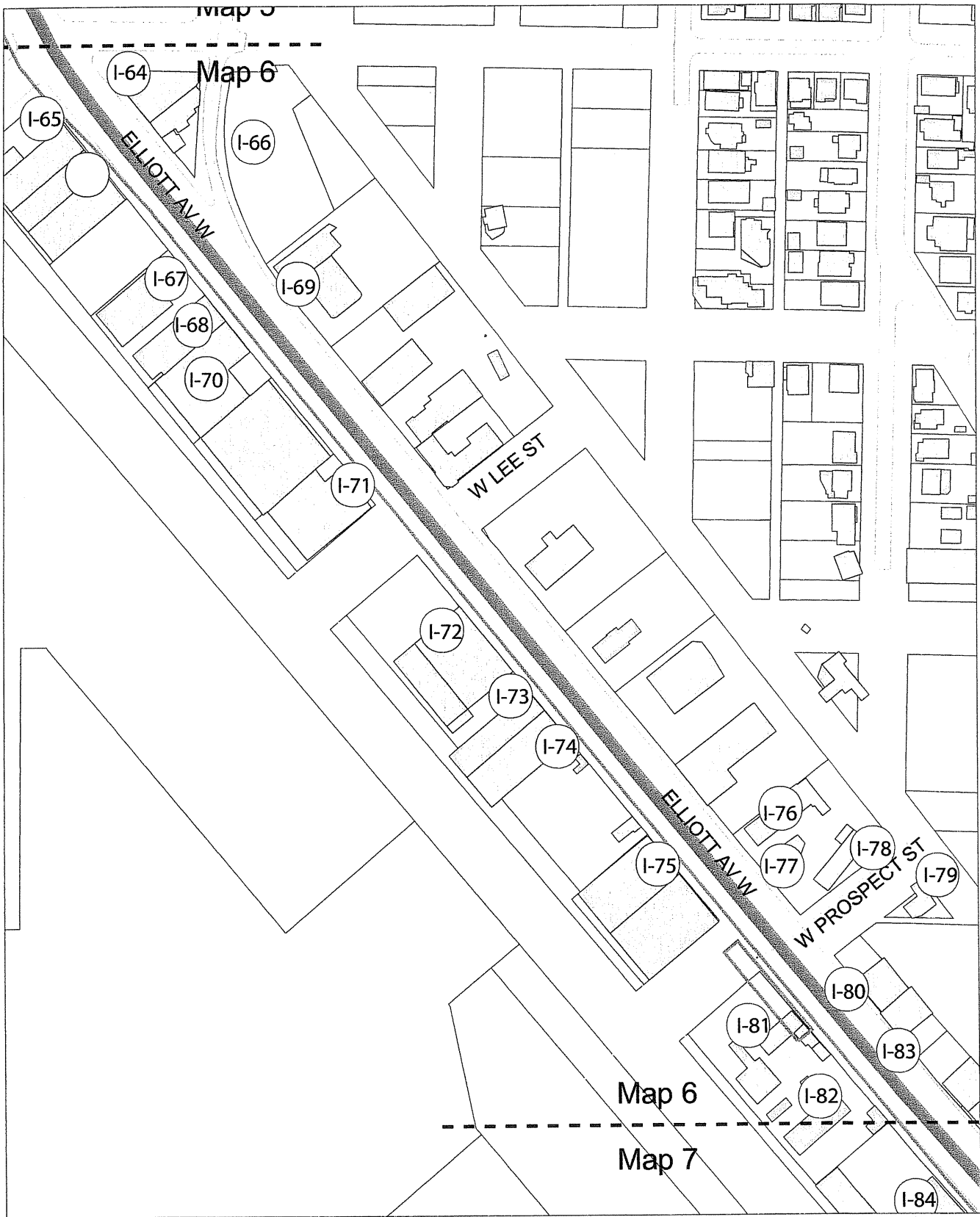
SEATTLE MONORAIL PROJECT

Historic Resources Study Interbay - Map 5

June 3, 2003



100 0 100 Feet

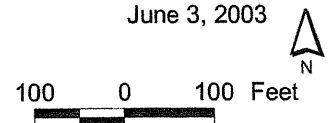


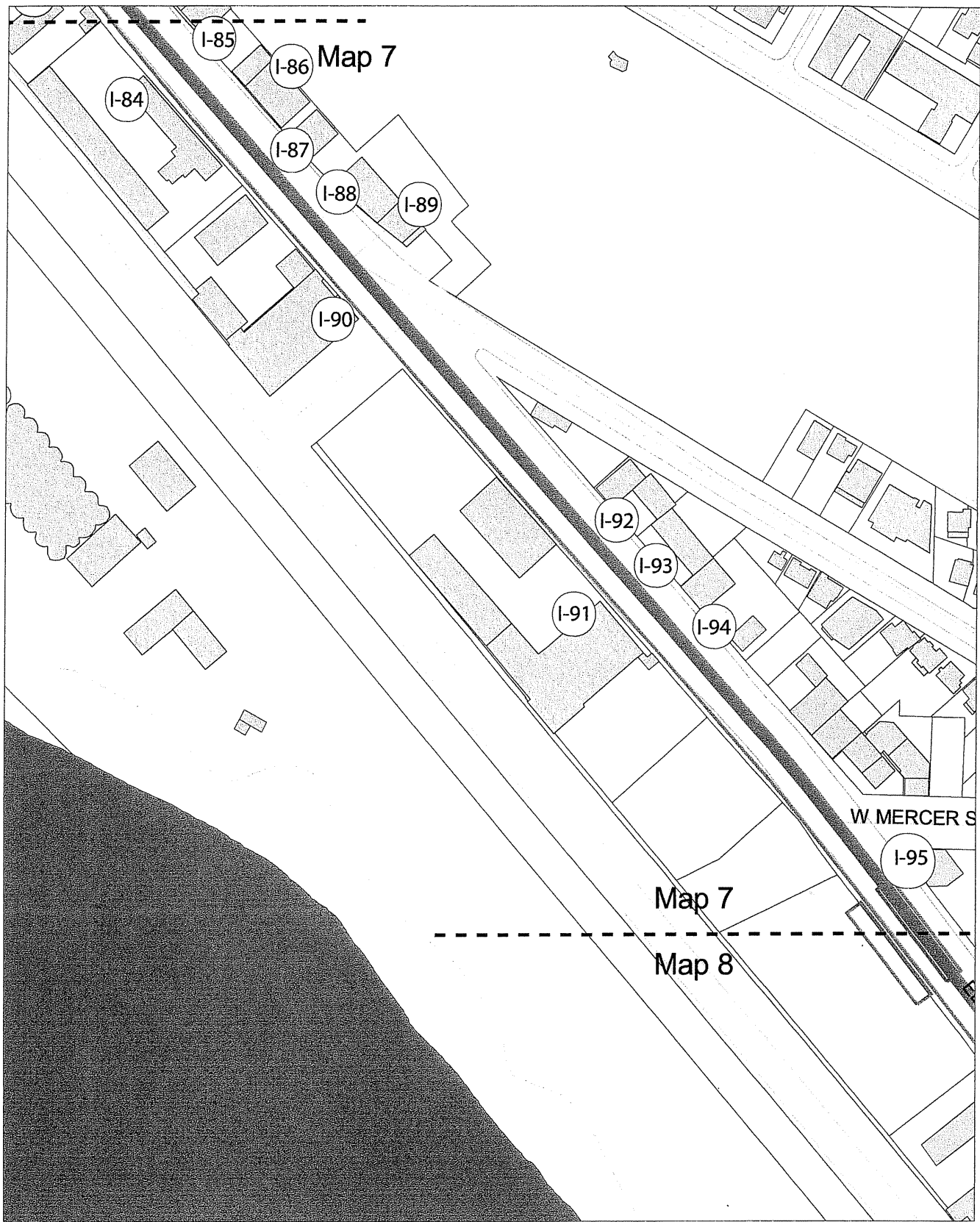
All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

Historic Resources Study Interbay - Map 6

June 3, 2003





All layers Copyright 2000
City of Seattle

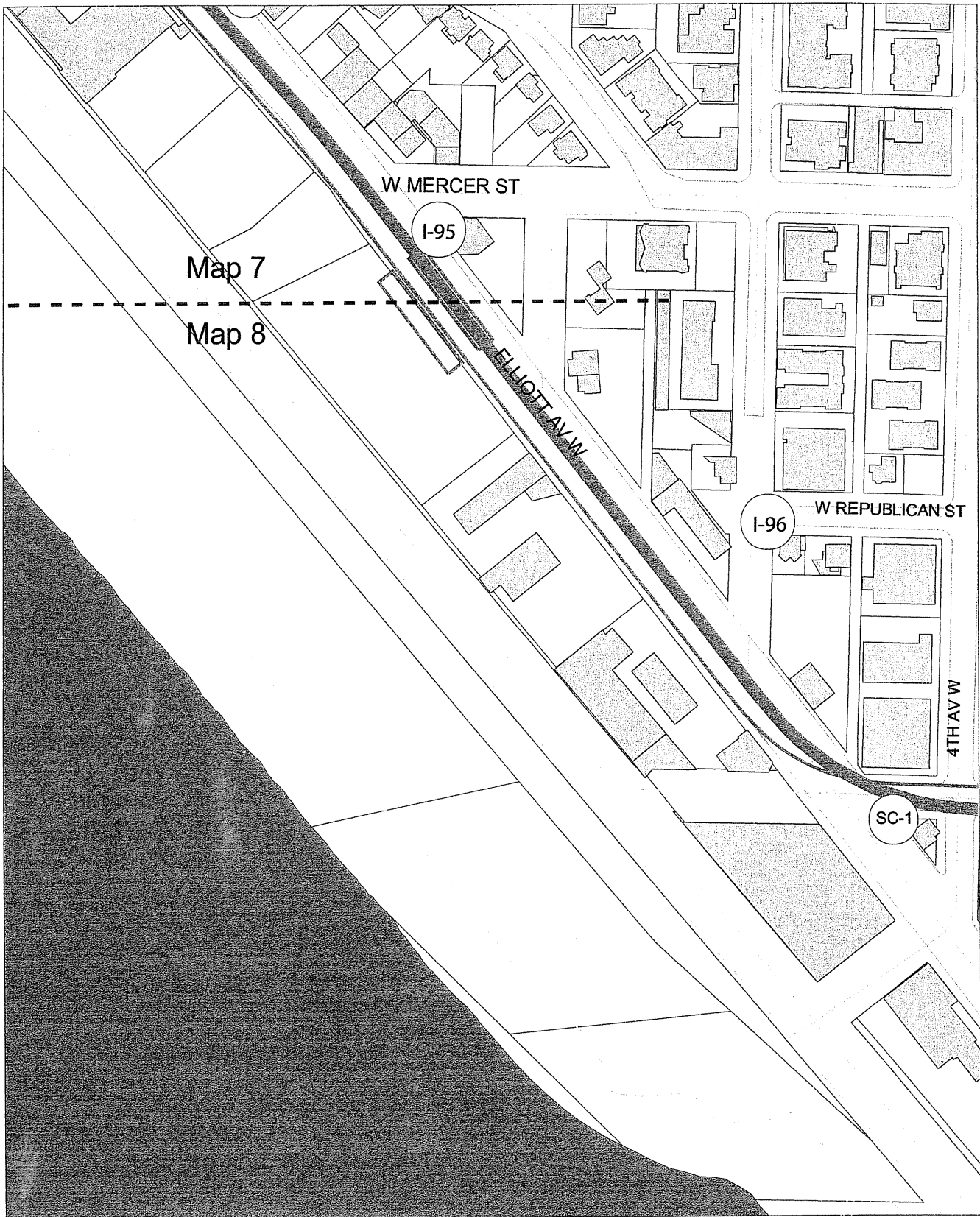
SEATTLE MONORAIL PROJECT

Historic Resources Study Interbay - Map 7

June 3, 2003



100 0 100 Feet

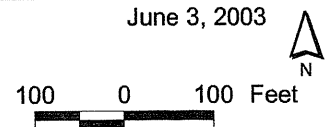


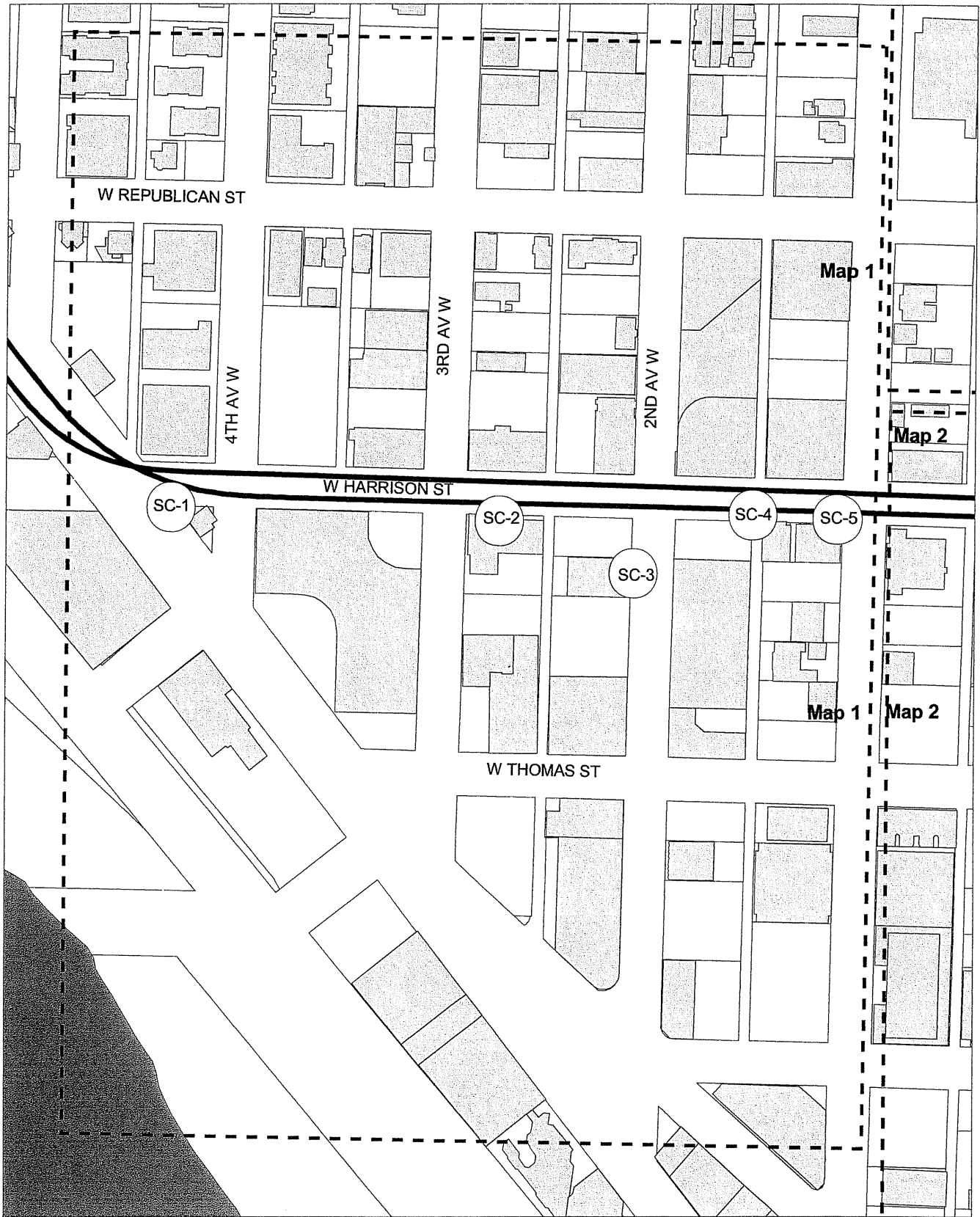
All layers Copyright 2000
City of Seattle


SEATTLE MONORAIL PROJECT

Historic Resources Study Interbay - Map 8

June 3, 2003





All layers Copyright 2000
City of Seattle

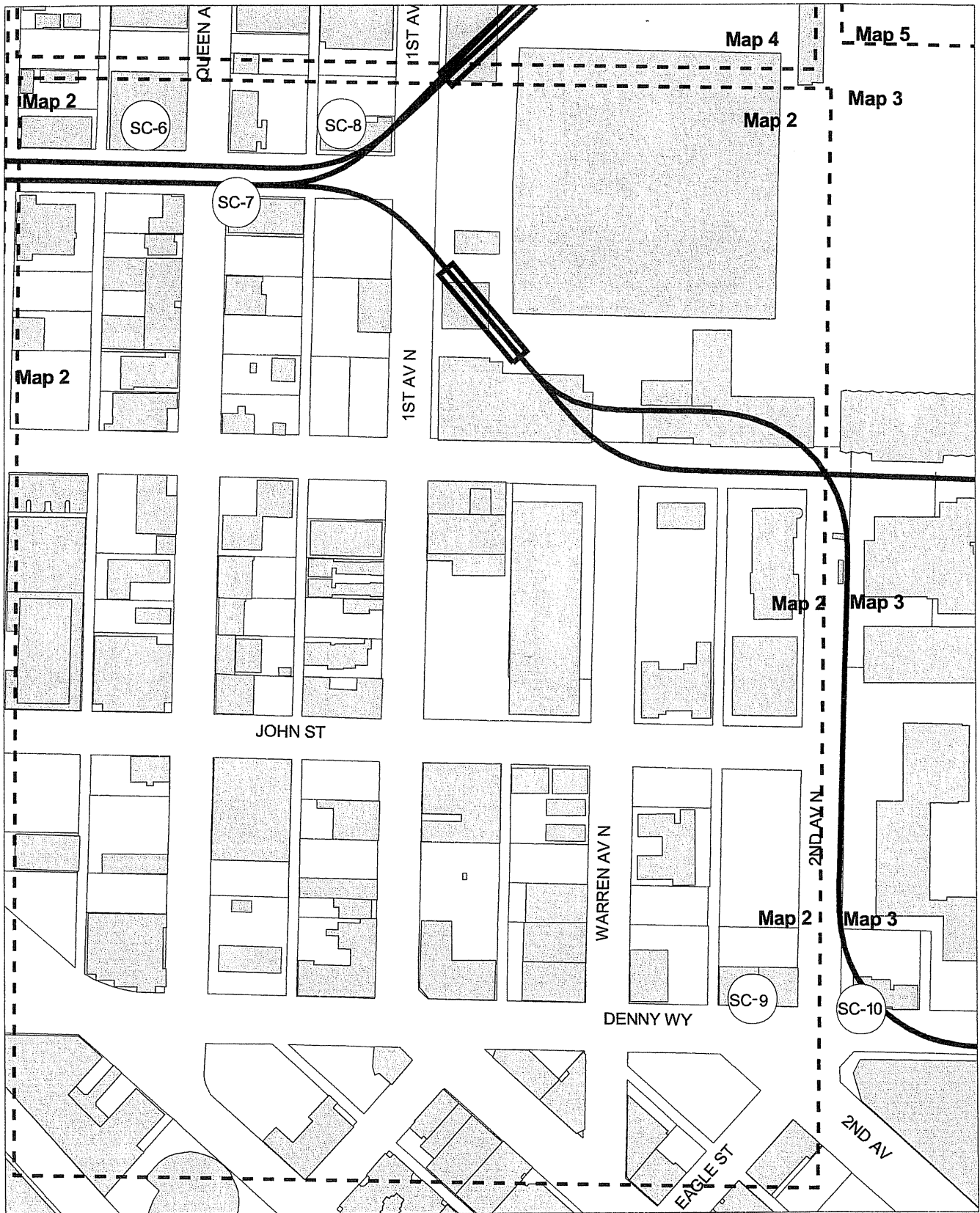
SEATTLE MONORAIL PROJECT

Historic Resources Study
Seattle Center Area
Map 1



0 200 Feet

May 23, 2003



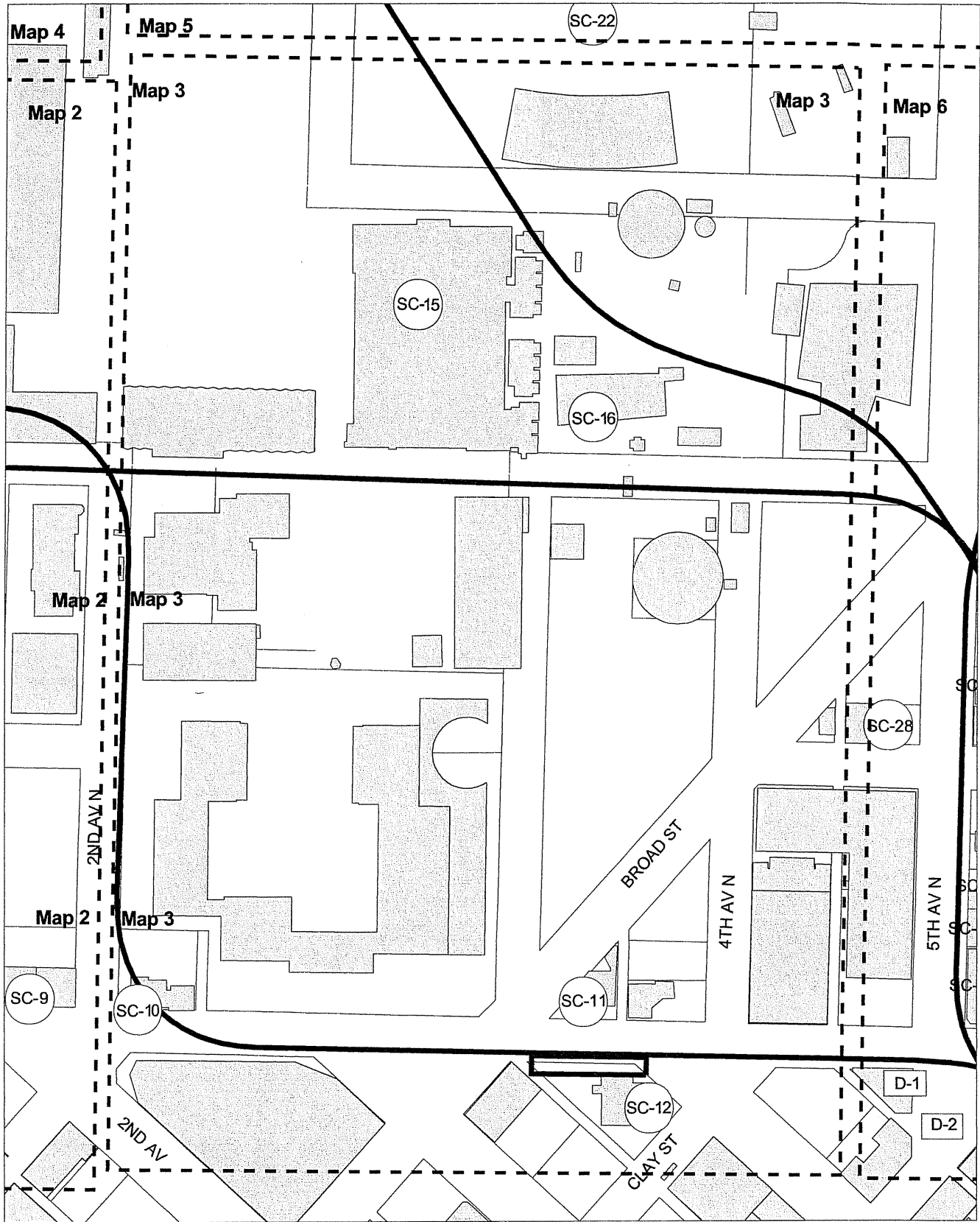
All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

Historic Resources Study **Seattle Center Area** **Map 2**



0 200 Feet



All layers Copyright 2000
City of Seattle

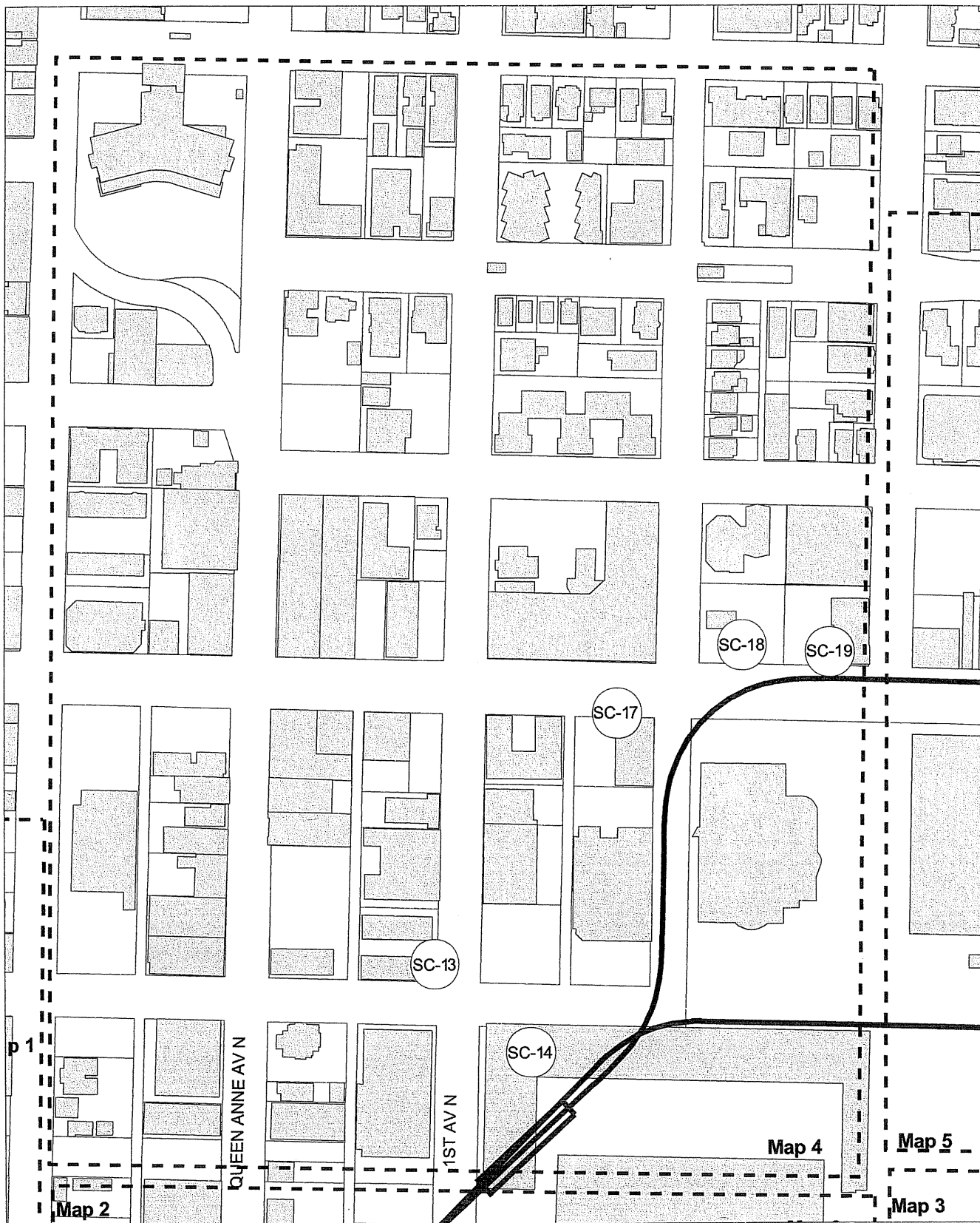
SEATTLE MONORAIL PROJECT

Historic Resources Study **Seattle Center Area** **Map 3**

May 23, 2003



0 200 Feet



All layers Copyright 2000
City of Seattle

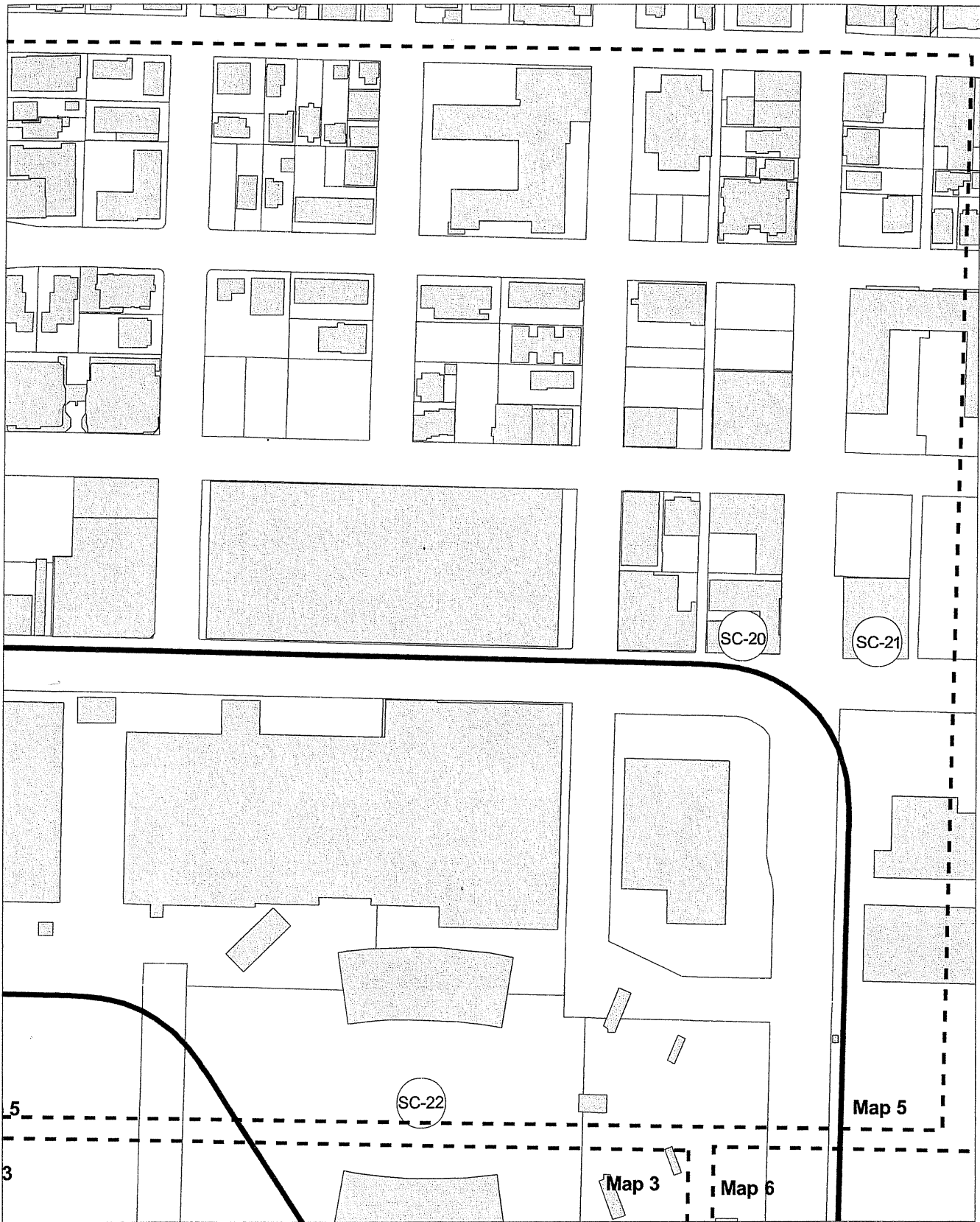
SEATTLE MONORAIL PROJECT

Historic Resources Study **Seattle Center Area** **Map 4**

May 23, 2003



0 200 Feet



All layers Copyright 2000
City of Seattle

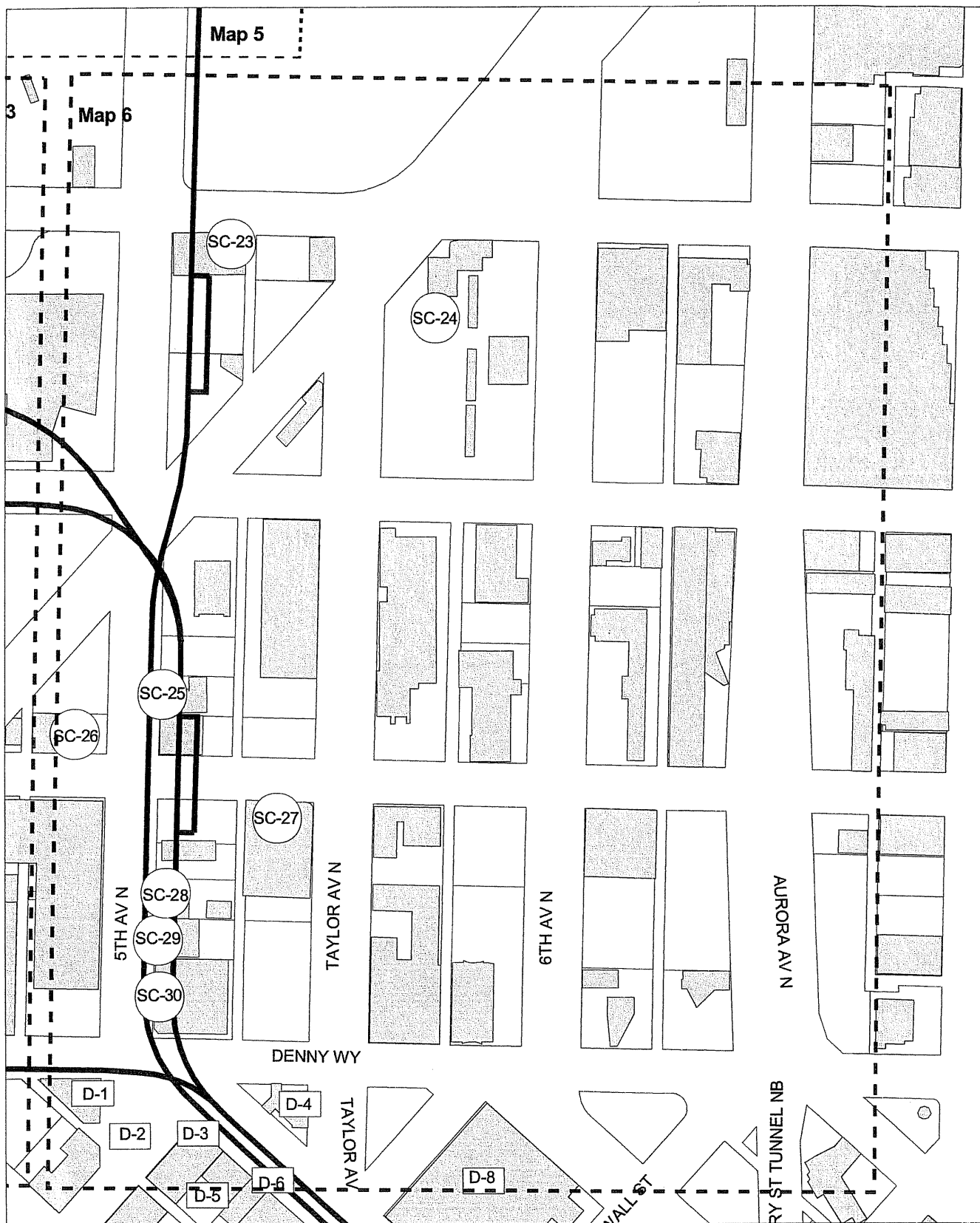
SEATTLE MONORAIL PROJECT

**Historic Resources Study
Seattle Center Area
Map 5**

May 23, 2003



0 200 Feet



All layers Copyright 2000
City of Seattle

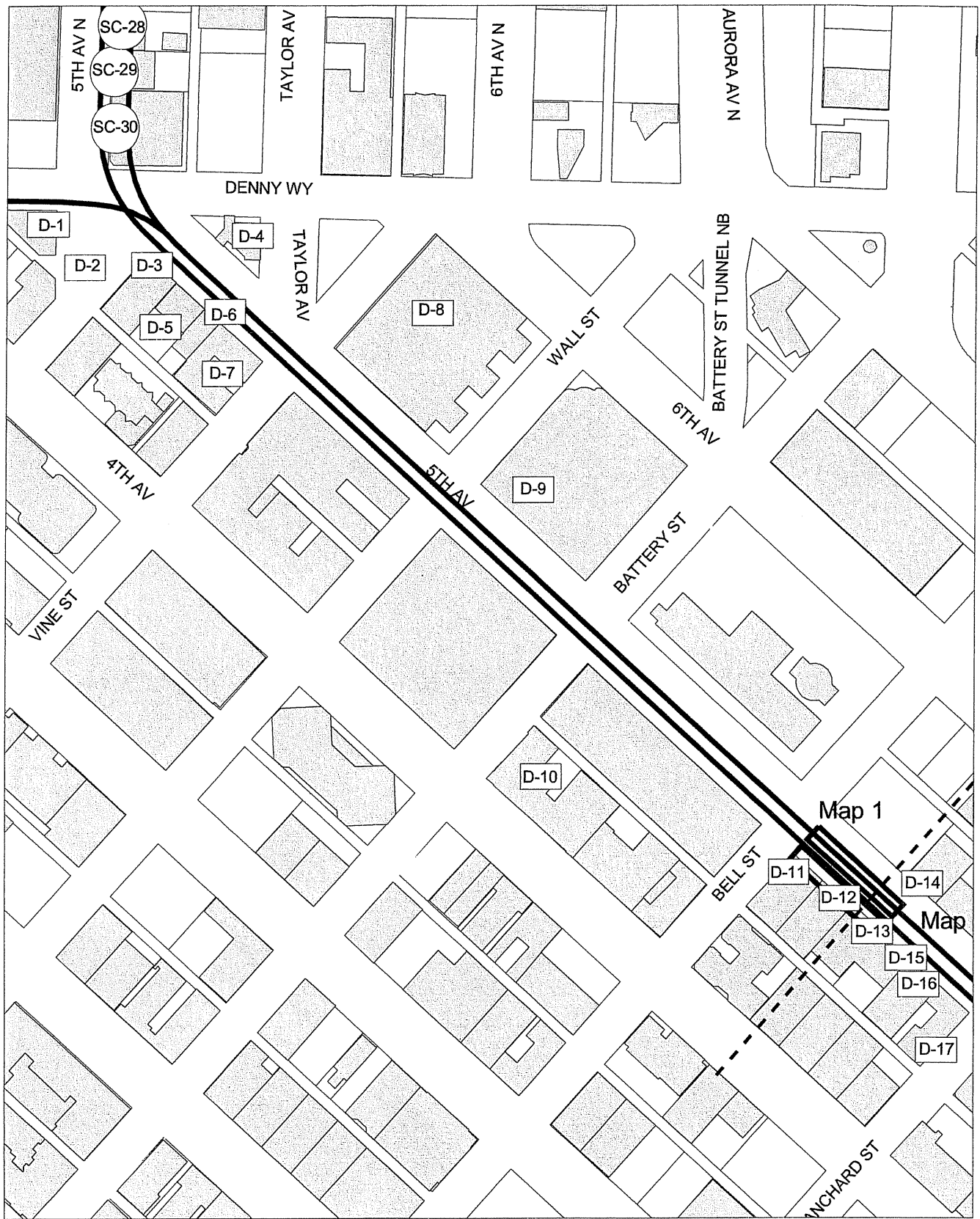
SEATTLE MONORAIL PROJECT

Historic Resources Study Seattle Center Area Map 6



0 200 Feet

May 23, 2003



All layers Copyright 2000
City of Seattle

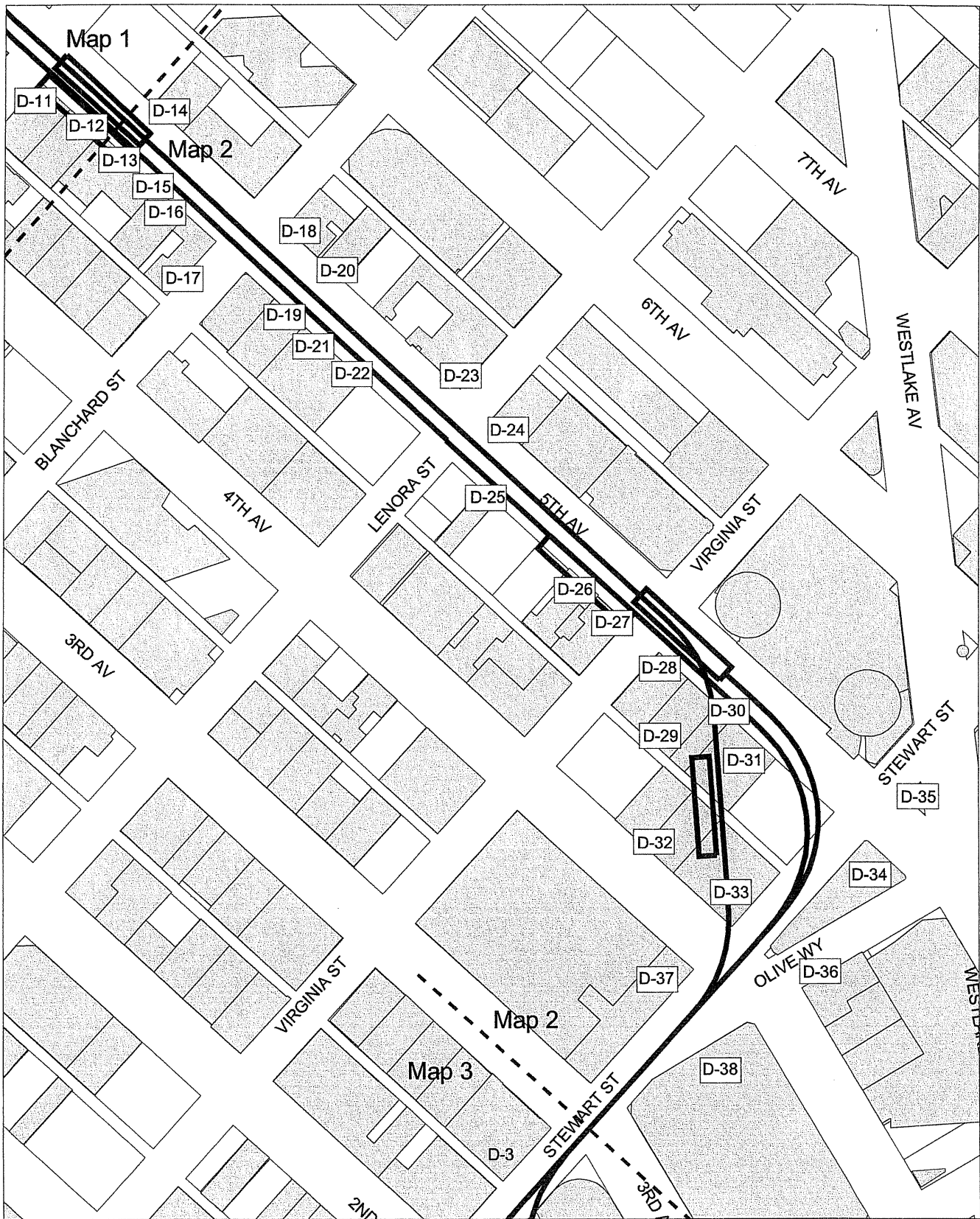


Historic Resources Study **Downtown** **Map 1**



0 200 Feet

May 23, 2003



All layers Copyright 2000
City of Seattle

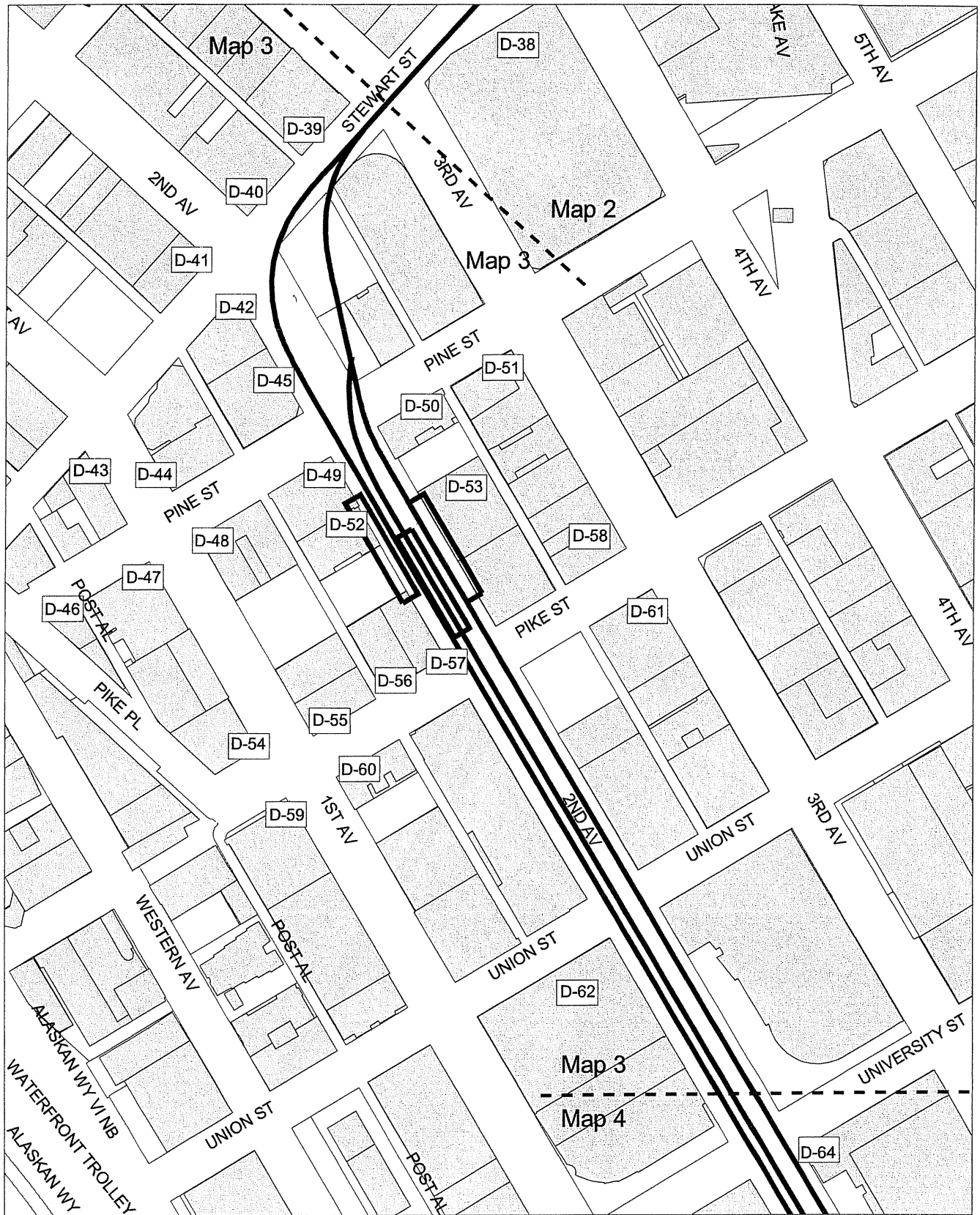


Historic Resources Study **Downtown** **Map 2**

May 23, 2003



0 200 Feet



All layers Copyright 2000
City of Seattle

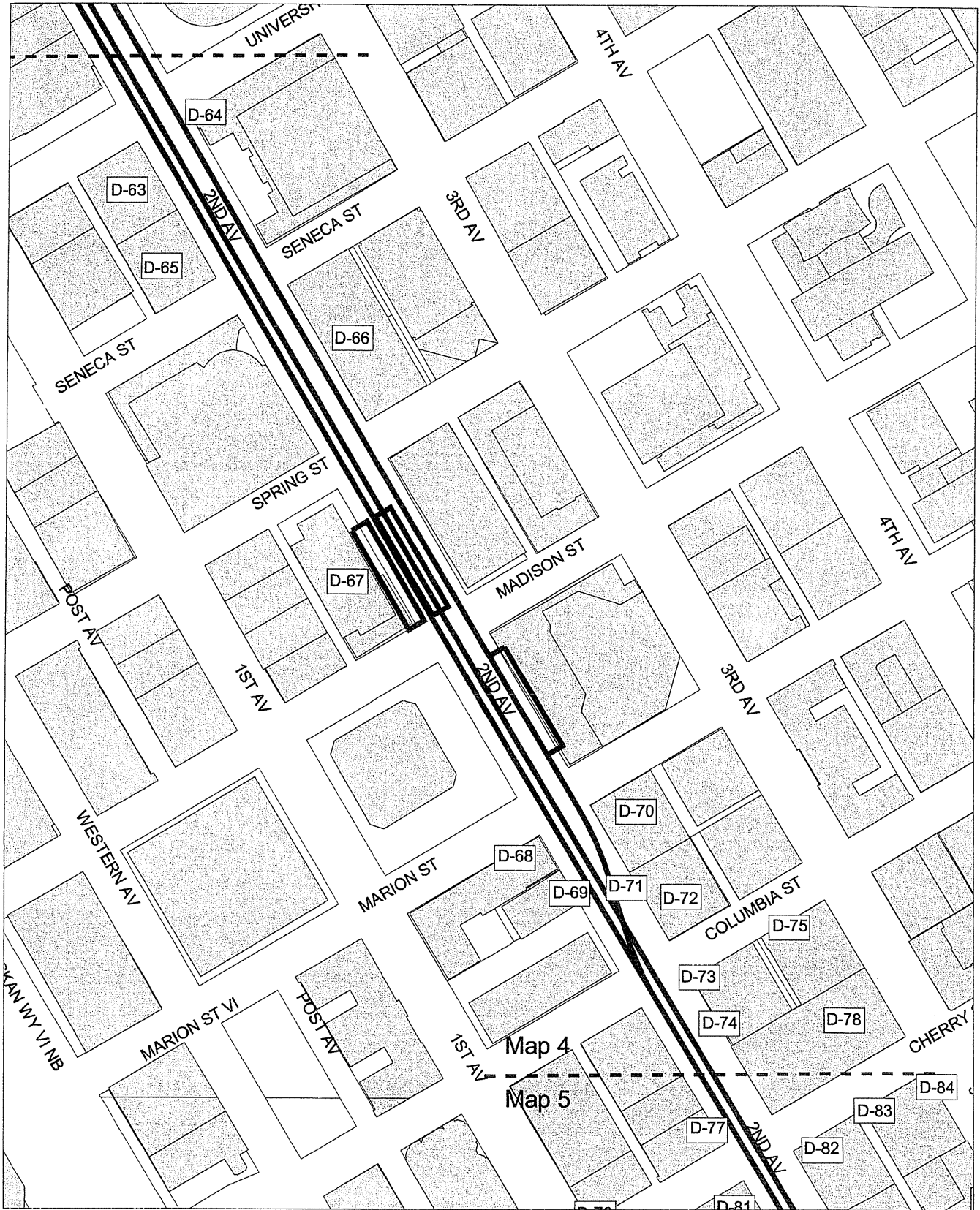


Historic Resources Study Downtown Map 3

May 23, 2003



0 200 Feet



All layers Copyright 2000
City of Seattle

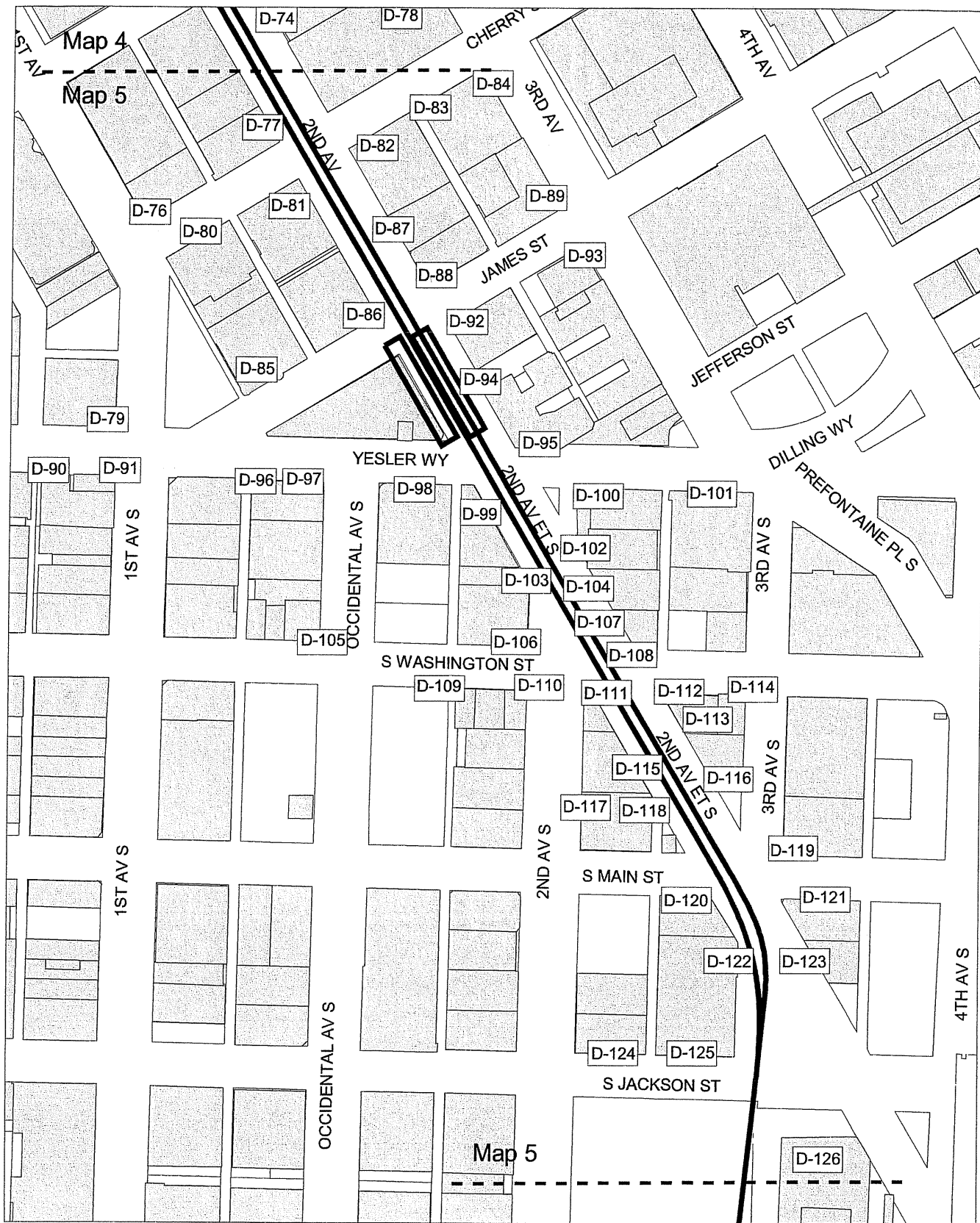
SEATTLE MONORAIL PROJECT

Historic Resources Study Downtown Map 4

May 23, 2003



0 200 Feet



All layers Copyright 2000
City of Seattle

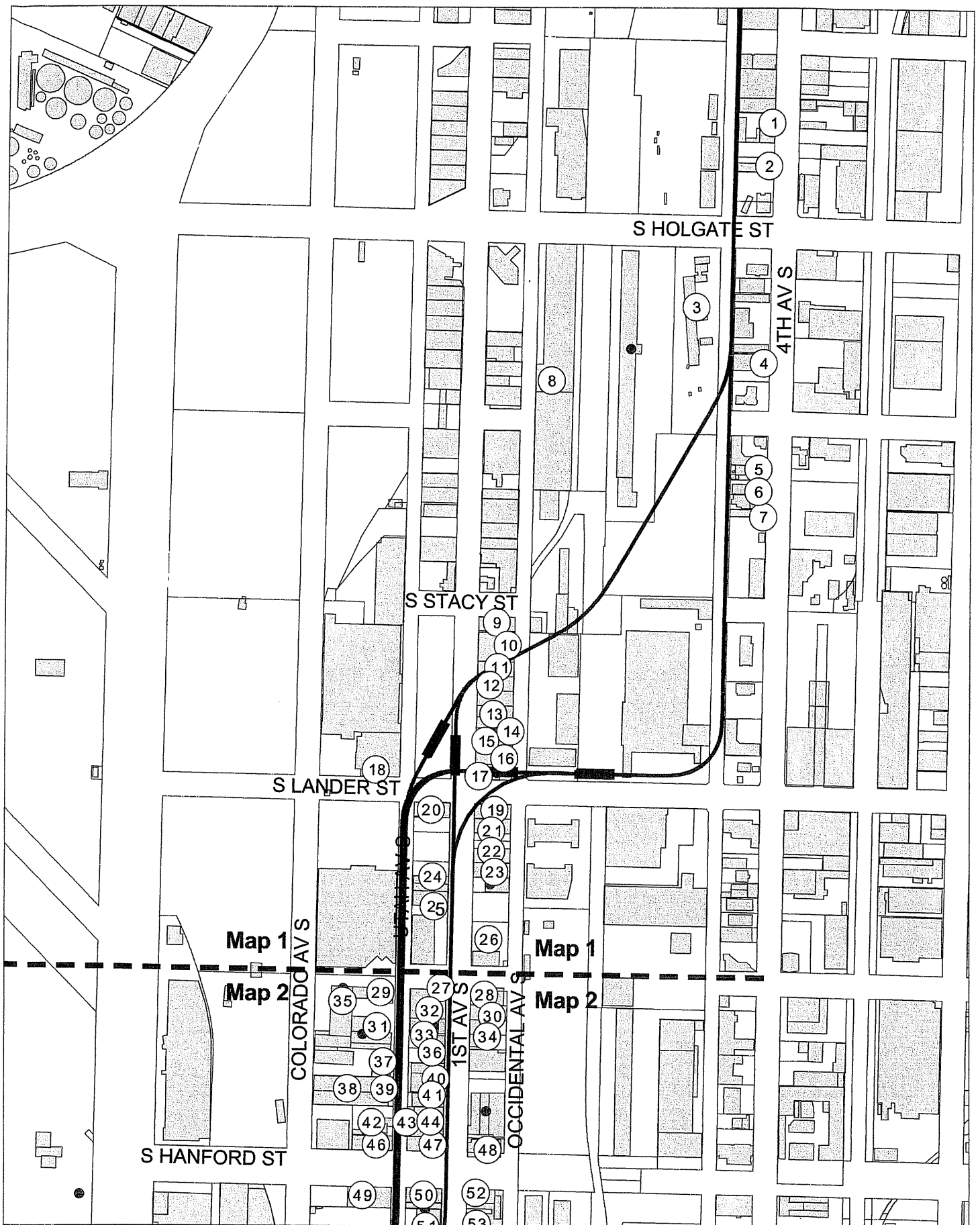
SEATTLE MONORAIL PROJECT

Historic Resources Study Downtown Map 5



0 200 Feet

May 23, 2003



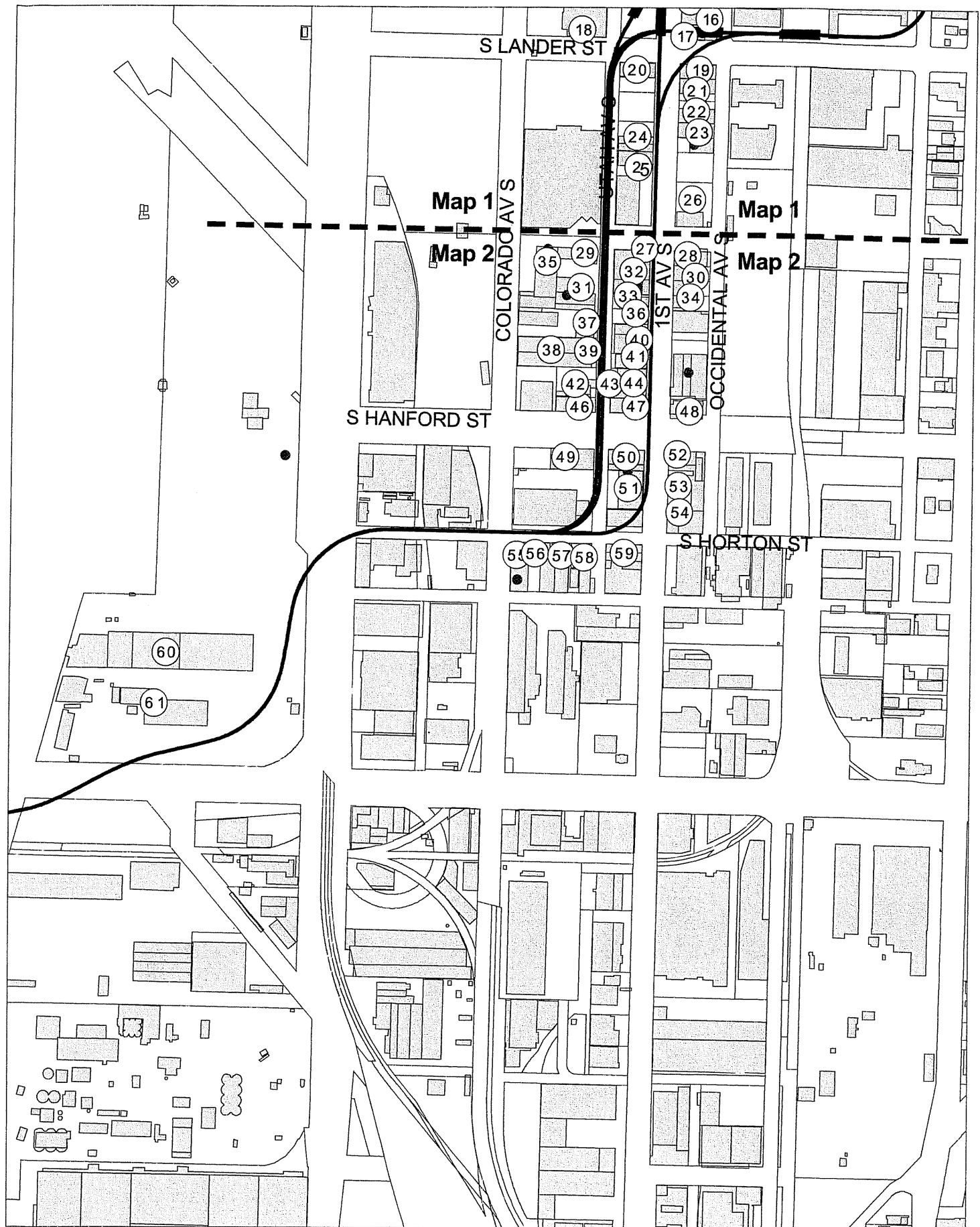
All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

Historic Resources Study
SODO - Map 1

300 0 300 Feet

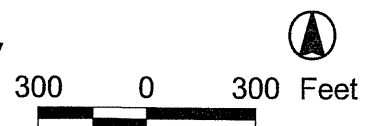


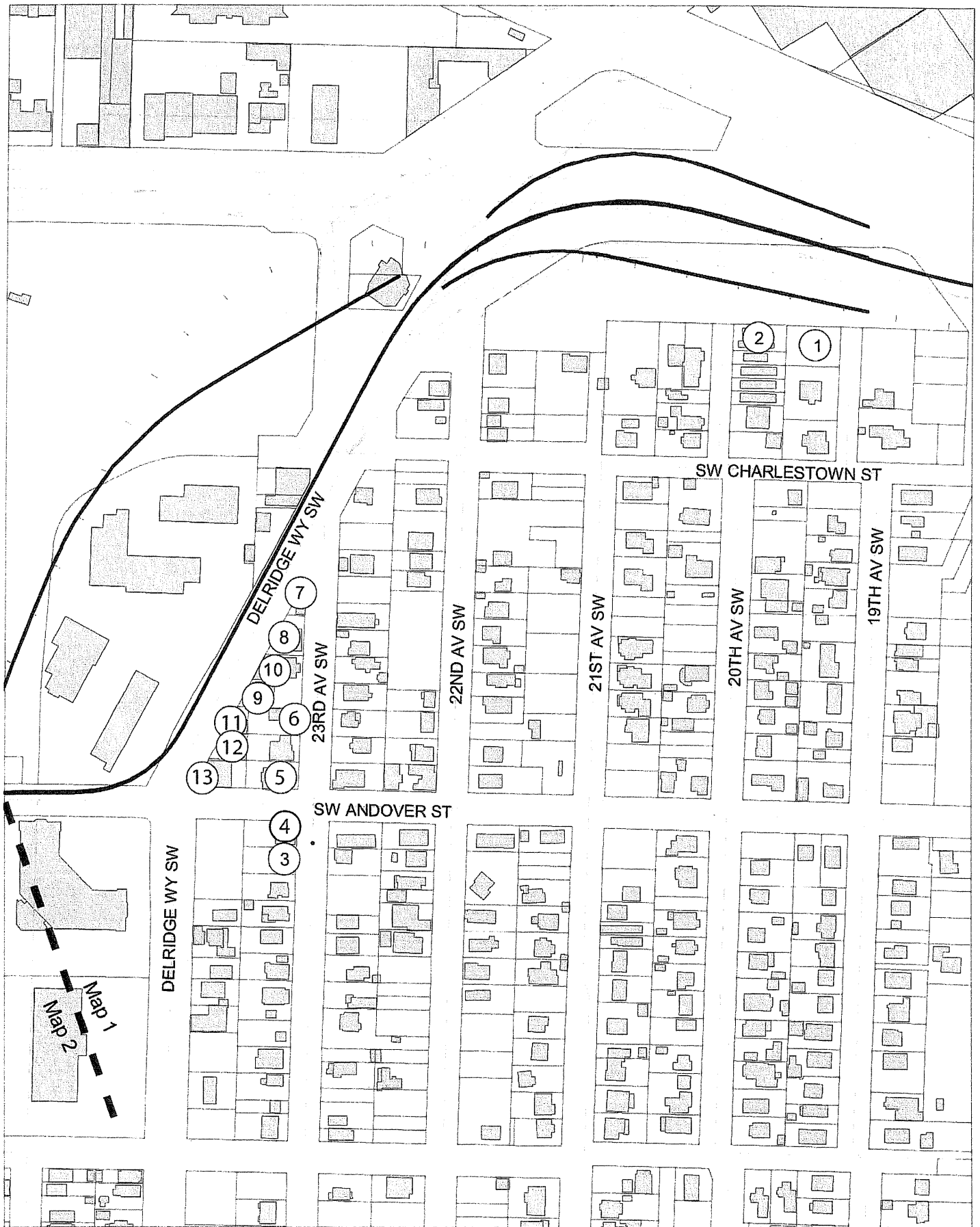


All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

Historic Resources Study
SODO - Map 2





All layers Copyright 2000
City of Seattle

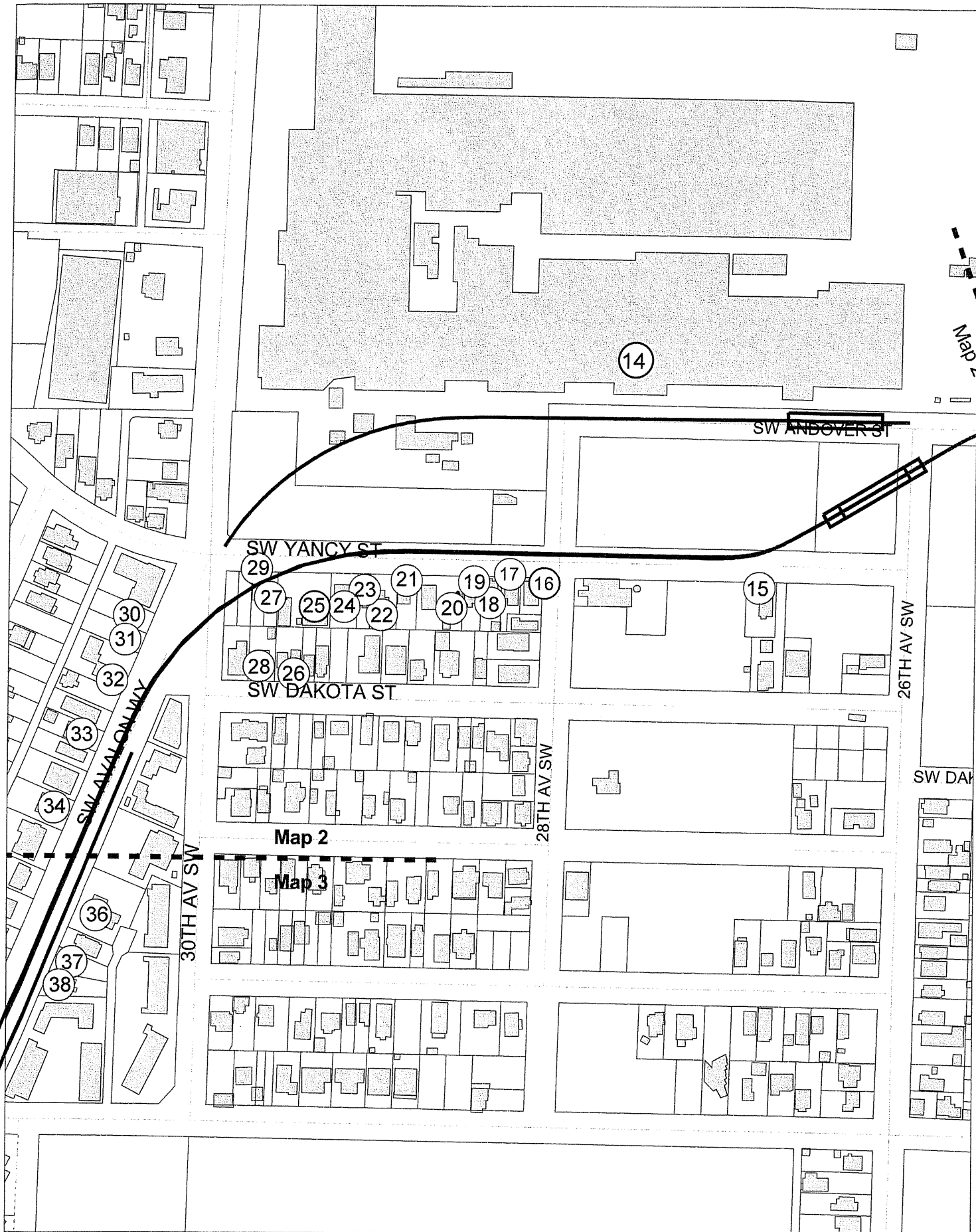
SEATTLE MONORAIL PROJECT

Historic Resources Study
West Seattle - Map 1

Date: 5-1-03



100 0 100 Feet



All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

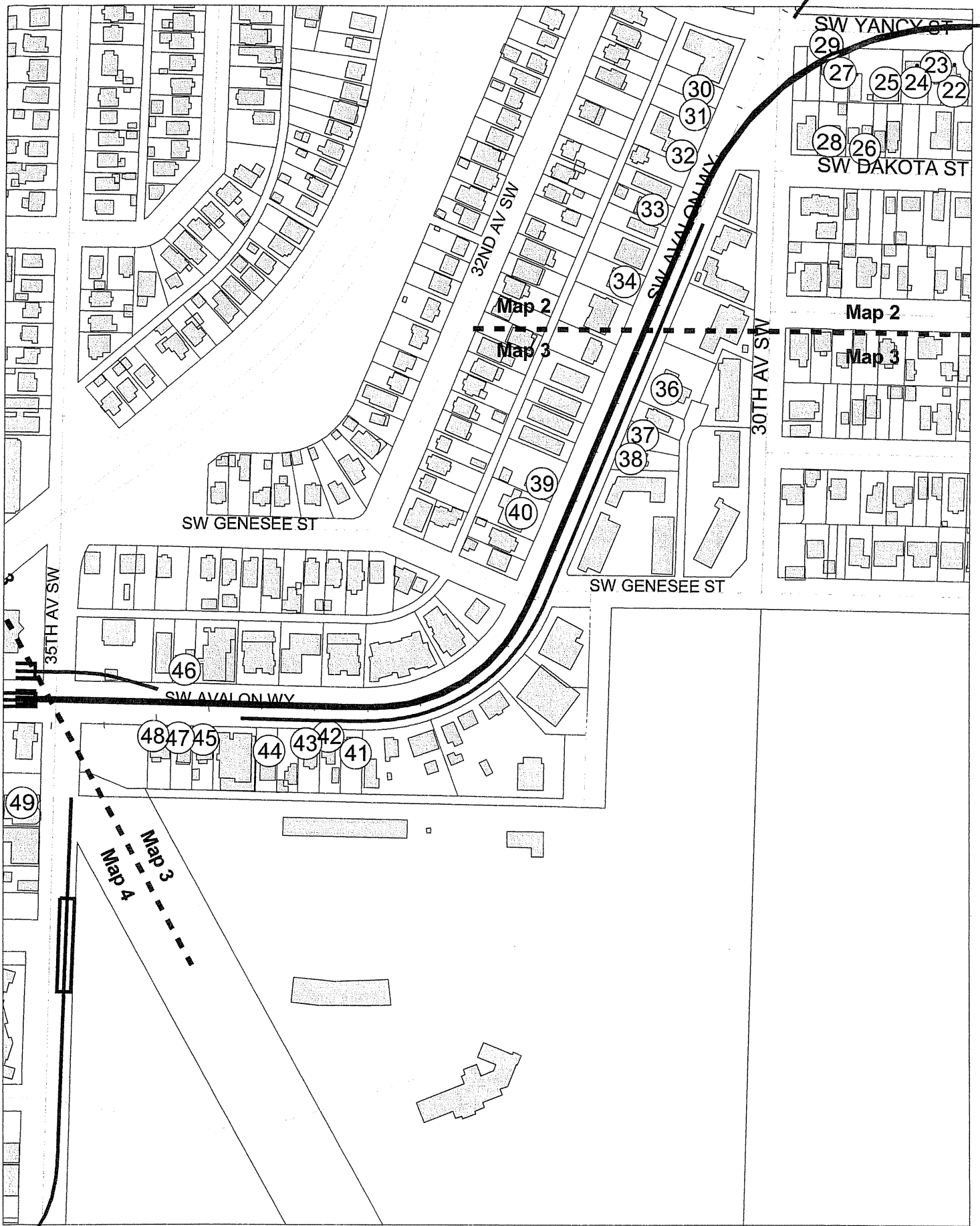
Historic Resources Study
West Seattle - Map 2

Date: 5-01-03



100 0 100 Feet





All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

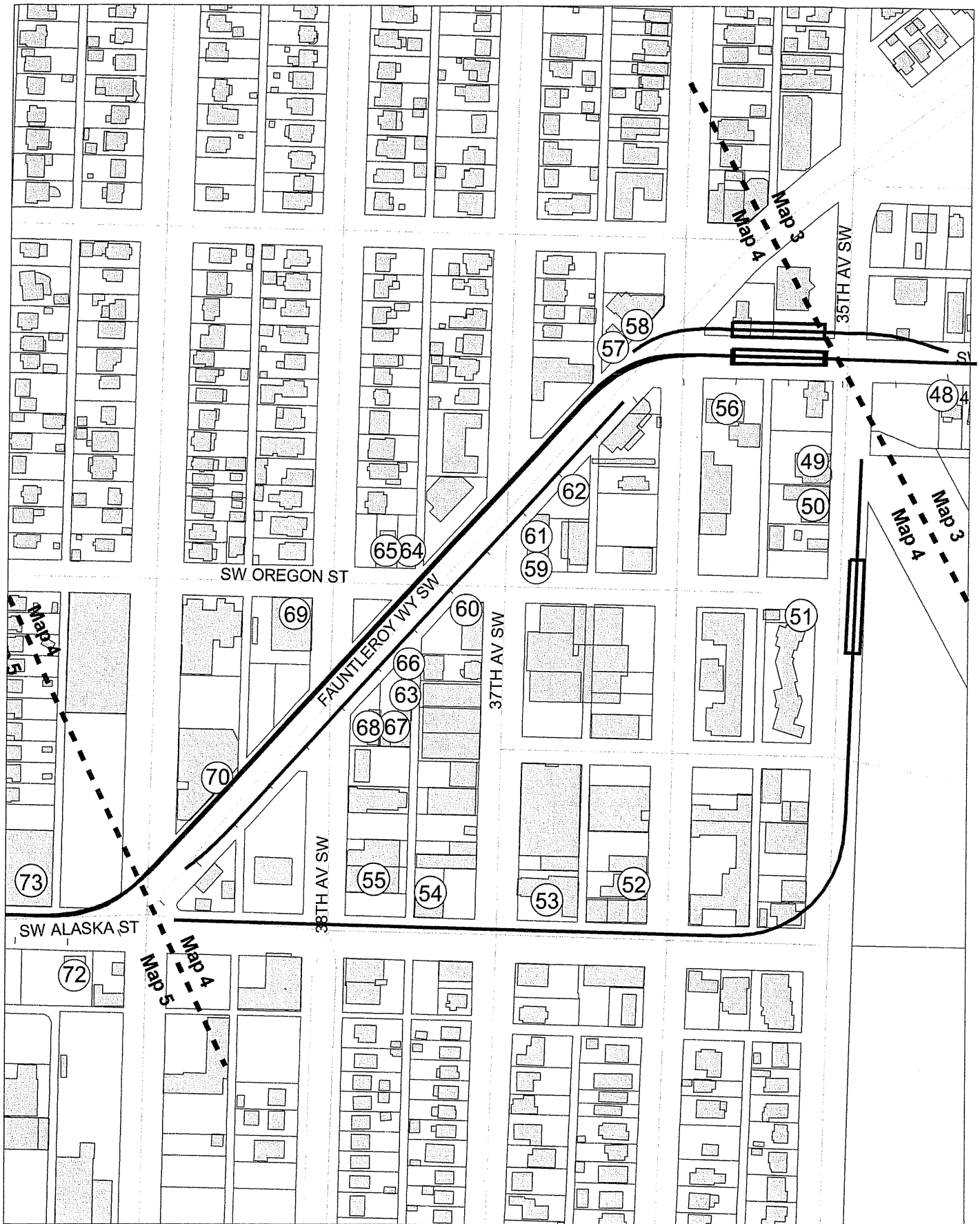
Historic Resources Study
West Seattle - Map 3

Date: 5-02-03



100 0 100 Feet





All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

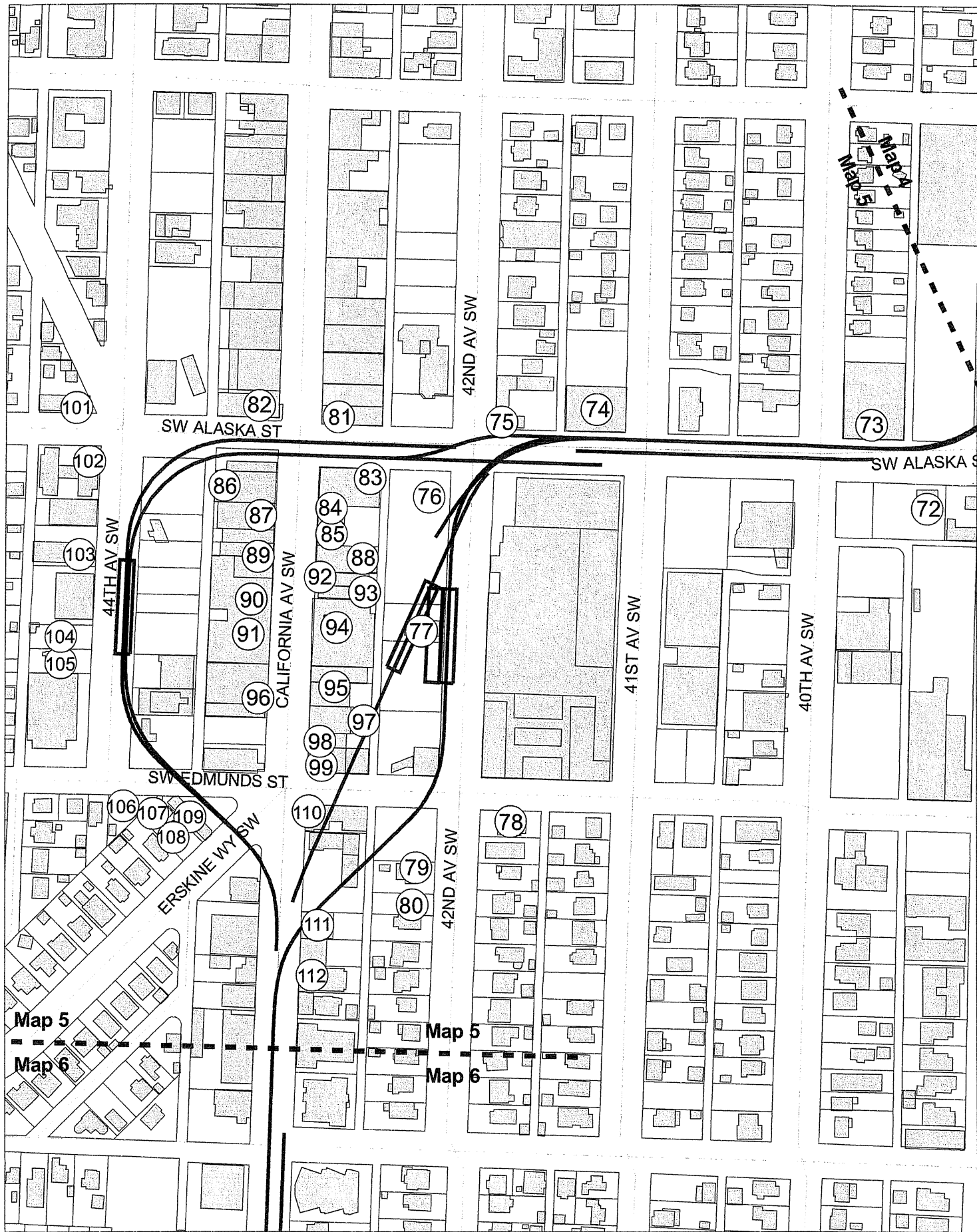
Historic Resources Study
West Seattle - Map 4

Date: 5-02-03



100 0 100 Feet





All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

Historic Resources Study
West Seattle - Map 5

Date: 05-02-03



100 0 100 Feet



All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

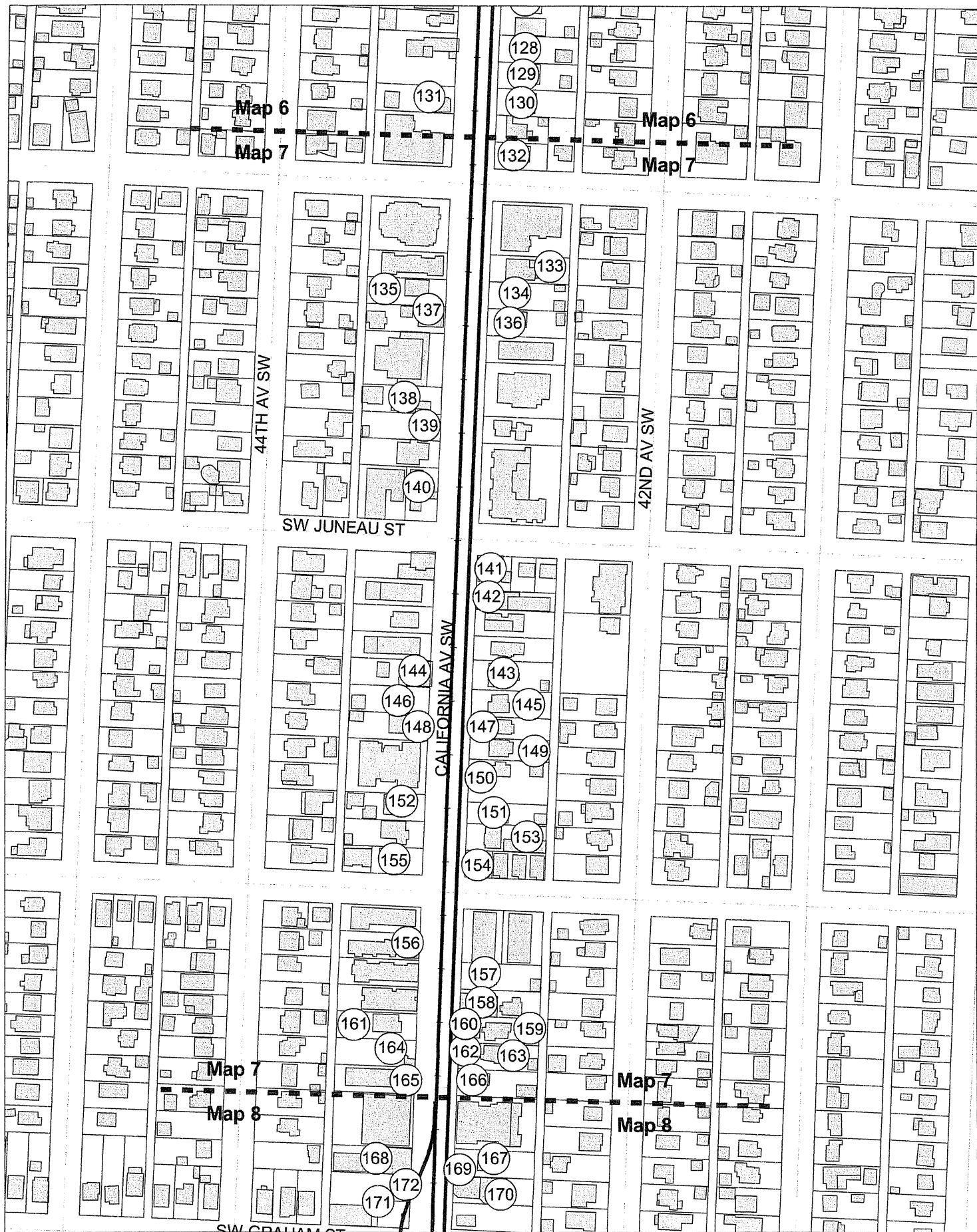
Historic Resources Study
West Seattle - Map 6

Date: 5-2-03



100 0 100 Feet





All layers Copyright 2000
City of Seattle

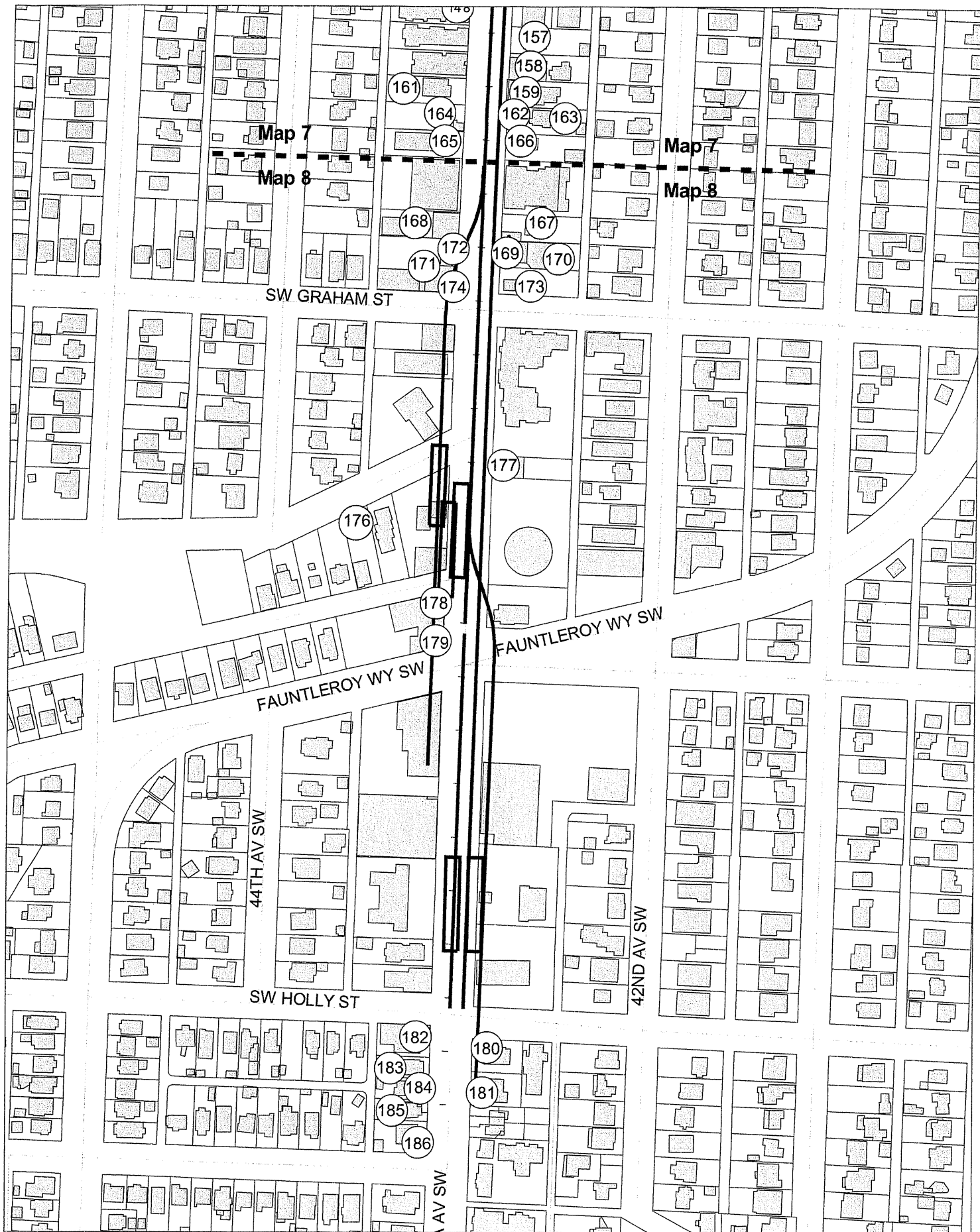
SEATTLE MONORAIL PROJECT

Historic Resources Study
West Seattle - Map 7

Date: 5-2-03



100 0 100 Feet



All layers Copyright 2000
City of Seattle

SEATTLE MONORAIL PROJECT

**Historic Resources Study
West Seattle - Map 8**

Date: 5-2-03



100 0 100 Feet

Appendix 4

Visual Simulations



West Bridge 1.1.1 box girder bridge; Looking northeast from Fishermen's Terminal



Far West Bridge 1.1.2 box girder bridge; Looking east from Fishermen's Terminal



Alternative 3.1 (Seattle Center/Republican); Looking southeast from the south end of Bagley Wright Theater lawn



SIMULATION FOR ENVIRONMENTAL IMPACT ANALYSIS PURPOSE ONLY. A CONSERVATIVELY HIGH ESTIMATION OF STRUCTURE SIZE & IMPACTS HAS BEEN ASSUMED FOR PURPOSE OF ENVIRONMENTAL REVIEW.

Alternative 3.1 (Seattle Center/Republican); Looking southeast from near Kobe Bell pavilion



Alternative 3.1 (Seattle Center/Republican); Looking northeast from whale sculpture near International Fountain



Alternative 3.1 (Seattle Center/Republican); Looking north from Festival Pavilion



Alternative 4.1; Looking southeast across Stewart Street along Third Avenue



Alternative 4.1; Looking east on Stewart Street from just west of Second Avenue



Alternative 4.1; Looking north on Second Avenue from Union Street



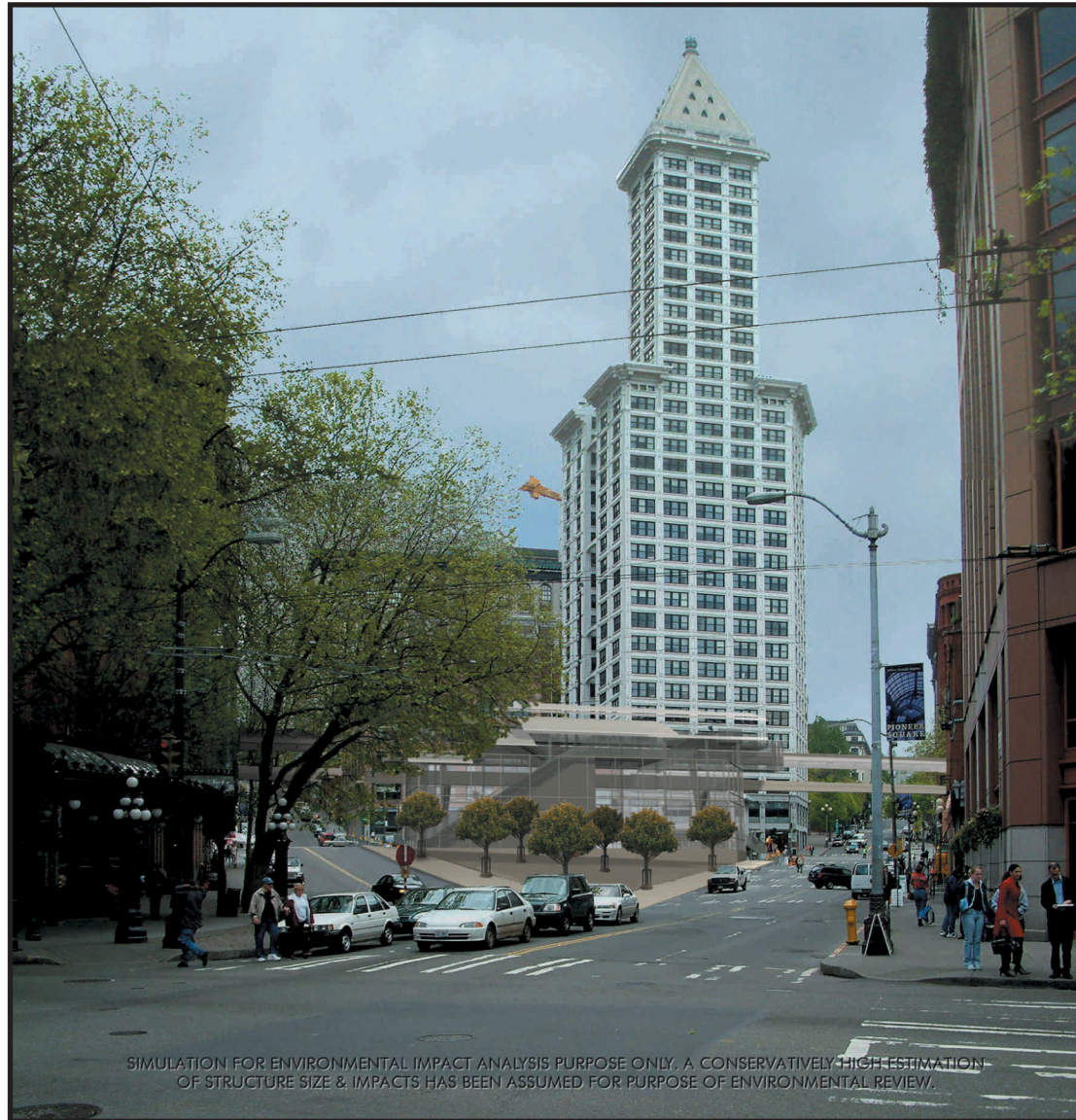
Madison 1 (West) station; Looking northwest from southeast corner of Marion Street and Second Avenue



Alternative 4.1; Looking west on University Avenue from Third Avenue



Alternative 4.1; Looking east from First Avenue along Cherry Street



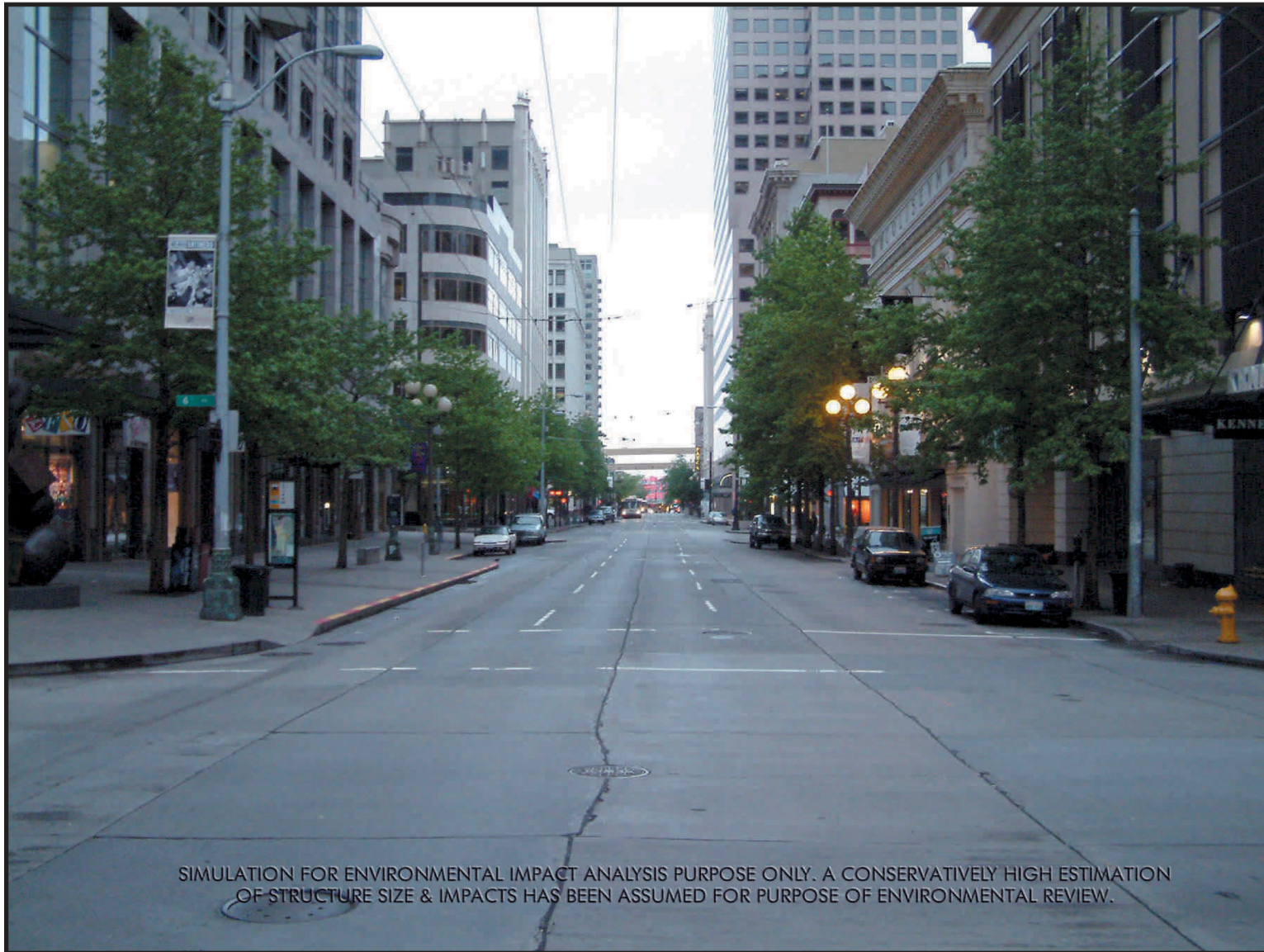
Yesler 2 (Center) station; Looking east on Yesler Way from west side of First Avenue



Yesler 1 (West) station; Looking northwest on Yesler from between Second and Third Avenues



Alternative 4.1; Looking west on Pike Street from Third Avenue



Alternative 4.1; Looking west on Pike Street from Fourth Avenue



Alternative 4.1; Looking north from Second Avenue Ext. S between S Main Street and S Washington Street

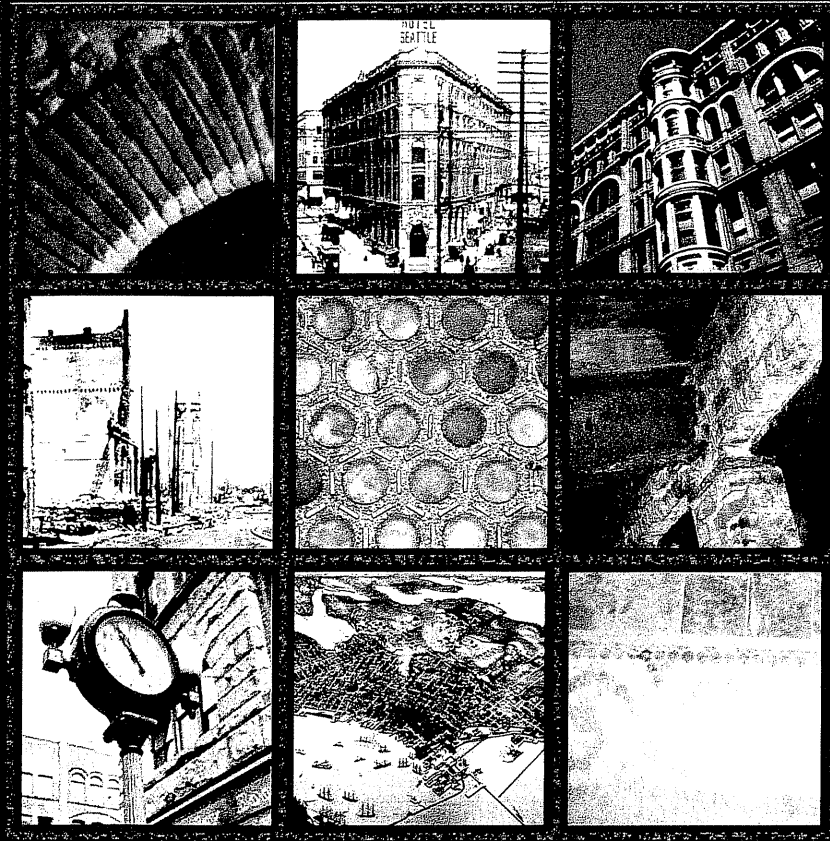


Alternative 4.1; Looking east from S Jackson Street and Second Avenue S

Appendix 5
Pioneer Square Historic District Areaways Mitigation Study

PIONEER SQUARE HISTORIC DISTRICT
AREAWAYS
HAZARD MITIGATION STUDY

MARCH 2003



Draft
TABLE OF CONTENTS

INTRODUCTION.....	2
STUDY OBJECTIVES	2
BACKGROUND.....	2
KEY ELEMENTS OF THE AREAWAYS	7
STRUCTURAL INVENTORY METHODOLOGY.....	8
HISTORIC RESOURCE ASSESSMENT	10
COMMUNITY INTERVIEWS.....	13
VIDEO	14
AREAWAY SURVEY MAP	14

LIST OF FIGURES

FIGURE 1	RECONSTRUCTION WITH BEAM REPLACEMENT
FIGURE 2	NEW SUPPORT BEAM/COLUMN
FIGURE 3	PARTIAL FILL
FIGURE 4	FULL FILL

LIST OF APPENDICES

APPENDIX A	DEFINITION OF TERMS
APPENDIX B	GENERAL CONDITION RATING
APPENDIX C	PIONEER SQUARE AREAWAYS HISTORICAL RATINGS MATRIX
APPENDIX D	PRIORITIZED LIST OF AREAWAYS IN NEED OF REPAIR
APPENDIX E	AREAWAY SURVEY MAP

INTRODUCTION

In 2000 the City of Seattle Transportation Department contracted with Parsons Brinckerhoff to inspect 110 areaways in the Pioneer Square Historic District to evaluate both their structural integrity and their historic features. The end product, as defined by City Council Resolution 29911, was to document and rate each areaway, balancing both structural safety and historic preservation concerns. This information is intended to be used by the City to make broader policy and financial decisions regarding maintenance and repair of the areaways for the future.

Just as work was being completed for this study, a significant earthquake occurred on February 28, 2001. This required that each areaway be reinspected to identify potential earthquake damage and revise ratings as necessary.

STUDY OBJECTIVES

- To evaluate each areaway for structural integrity, identifying unsafe elements.
- To identify and evaluate historical features in the areaways.
- To develop a rating system balancing structural, historic and public safety concerns to make decisions about areaway repair.
- To provide a context for future decisions regarding changes to historic characteristics of the areaways.
- To assist both the City and property owners with information on the structural condition and relative historic importance of their areaways.

BACKGROUND

At the end of the 19th century Pioneer Square flourished as Seattle's commercial center. In the first decades of the 20th century, however, the city's business core moved north, to newer and larger buildings. This loss, exacerbated by the Depression of the 1930s, began a long period of decline for Pioneer Square. Maintenance of most buildings was neglected, and many sat vacant for long periods. However, in the 1970s, interest in the area ignited, resulting in numerous city studies, plans and legislative and funding efforts to preserve and revitalize the area.

Among these studies was an inventory of areaways, conducted by the Engineering Department, a study of areaway characteristics and uses and a neighborhood plan, all done in the 1973-74 period. These documents form the basis for current studies and plans. Each is summarized briefly below.

Pioneer Square Areaway Study Phase I Areaway Inventory

City of Seattle Department of Engineering, c. 1973

The purpose of this study was to rate the structural soundness of each areaway as a whole, and of each individual structural element. City staff did a visual inspection of each areaway within the original historic district boundaries. The inspection identified general deterioration to many areaways, primarily from settlement and moisture damage due to lack of maintenance and the high water table. About half were found to be in good condition; 23% in fair condition, 18% in poor condition, and 7% in critical condition. However, many of those rated "good" or "fair" required significant repairs to some elements. ✓

In 1983 this inventory was updated and expanded to include the added sections of the historic district. A further update began in 1999 and was completed in 2001 by Parsons Brinckerhoff as part of the current study.

Overview Planning Report Areaway Study

Pioneer Square Historic District

Makers, 1974

This document has become a primary reference for areaway information and history. Its purpose was to examine the history and documentation of the areaways and to prepare guidelines and criteria for their development and use. The report reviewed the early history and construction of these features, going back to the original ordinances and building codes.

This report summarizes the typical characteristics and materials found in areaways, including decks (typically with brick or concrete arches), street and building walls (usually of brick or stone, often with arched openings). It also addresses the difficult issue of historical uses of the areaways and identifies some existing artifacts that may be reminders of these uses, such as door and window sash, hardware and machinery, and floor and wall surfaces. The report makes recommendations for future uses of the areaways and for maintaining and rebuilding them. It recommended that the decks and walls be rebuilt, as necessary, with brick facing added to achieve the historic appearance. It also urged that other features, including prismatic skylights, open stairwells and sidewalk elevators be reconstructed or maintained in keeping with the standards found in the original 1893 ordinance.

Pioneer Square Areaway Study Phase II

City of Seattle Department of Engineering, 1976

The purpose of this second phase of the areaway study was to develop planning concepts, design criteria, prototype designs and cost data to enable the mayor and city council to evaluate the extent to which the city should undertake areaway rehabilitation. The report gives an overview of the major elements of an areaway, the legal aspects and the conditions and uses in the areaways. It also provided prototype designs: two designs for replacing corroded steel beams; two for rebuilding the deck (including installation of a concrete slab); six approaches for rebuilding the street wall (varying in cost, structural support and materials; and, two methods of repairing failing transverse walls. In each case an "in-kind" construction method was presented for historic preservation purposes, generally consisting of rebuilding the element in concrete and facing it with brick. It was assumed that an owner doing the repair would choose the less expensive solutions, while the city would sometimes choose more expensive options such as in-kind repair for preservation purposes.

In summary, the report recommended that:

- The Engineering Department should inventory all city areaways (including those not in Pioneer Square), and prioritize the needed repair work;
- The city should, generally speaking, bear the cost of street wall repair/rehabilitation/maintenance, while the property owner would pay for sidewalk/deck repairs and maintenance; and,
- the funding would be dependent on the Pioneer Square Preservation Board determining the level of historic rehabilitation needed for each areaway, as accepted by the city council.

It is not known if this report was adopted.

Pioneer Square Historic District Plan Makers, 1974

This first Pioneer Square neighborhood plan addressed sidewalks and areaways, primarily quoting from the Makers report of the same year. With regard to areaway maintenance and rebuilding, the plan recommended that repairs be made "in kind," using the 1893 ordinance as a guideline for appearance. This typically meant using brick facing over concrete structures; if more economical construction methods were used, "... the end product should closely adhere to the usual appearance of the code construction."

Pioneer Square Historic District Areaway Right-of-Way Guideplan Jones & Jones, 1978

This plan was prepared for the Seattle Engineering Department, and formed the basis for the two documents that followed in 1984 and 1990 (see below).

Program Implementation Policy Seattle Engineering Department, 1984

This report, drawn from the 1978 Jones & Jones report, divided the Pioneer Square Historic District into three areas, based on the historic features found in the areaways. These three areas were used in the 1990 Plan to identify the preferred repair options (see below).

Mayor's Recommended Pioneer Square Plan Update City of Seattle Department of Community Development, 1990

This neighborhood plan update built on the previous plans, relying heavily on the Overview Planning Report from 1974 and the subsequent areaway plan done by Jones & Jones in 1978. According to this plan, the recommendations regarding areaway responsibility, funding and maintenance made in the 1970s were not enacted as formal city policy. The Engineering Department continued to repair critical areaways as funding became available, attempting to negotiate participation with property owners (usually unsuccessfully).

The 1990 Plan identified three types of alternative repairs (as described in the 1978 guideplan) and the areas where they should be applied. The first option, repair-in-kind, was recommended for the oldest and most historic areaways (as indicated in the 1984 SED areaway rehabilitation plan). The structural repair option was recommended for other areaways. Filling would be recommended in only a few instances.

The repair type was separated into three regions over Pioneer Square Historic District. Area A included the oldest buildings, those around Pioneer Place, First Avenue South and Occidental Avenue South. Generally speaking, Area B was slightly to the east of Area A, with newer buildings, and Area C was farther east and south, with more post-1900 buildings.

Repair-in Kind (Area A)

In this area retention/restoration of all historic features, including prismatic skylights is preferred. Where complete rebuilding is not required, stabilization with new beams to hold existing construction in place is acceptable. No encroachment or filling in the areaways is allowed, and no visible alteration to key features: vaulted ceilings; prism lights; building walls, archways and fenestration; bay and end walls and arched openings; street walls; special architectural features such as curved walls, pilasters and stepped walls. However, the plan supported new standards that would preserve the historic character of the areaways (with no specifics).

See Figure 1 for this type of repair.

Repair-to-Code (Area B)

In this area retention/restoration of historic features is preferred, but structural repairs may be done on a case-by-case basis.

Conventional structural repairs, meeting building codes, is allowed, provided that provisions are made for streetscape improvements such as tree wells, hydrants, light or signal bases and an adequate load factor. When used, this option will preserve to the maximum extent possible existing materials and configurations. Stabilization with new beams to hold existing construction in place is encouraged where rebuilding is not required. Engineering analysis shall consider the stability of the street wall, sidewalk and building wall. Maintaining usability of the areaway is encouraged.

See Figure 2 for this type of repair.

Option-to-Fill (Area C)

In these areas buildings are to be stabilized with new beams as needed to retain existing construction. Filling of an areaway and construction of a new street wall would be allowed only on a case-by-case basis, with the same provisions for streetscape improvements as listed above. This option is discouraged and is to be used in limited areas where structural failure is imminent and the Preservation Board approves use of this option. Only an ultra-light fill which may be removed without undue damage to the filled area will be approved.

Prismatic skylights should be retained in all repair-in-kind areas and should be considered as part of areaway retention in other areas. Light wells and stair wells should be retained wherever possible.

See Figures 3 and 4 for this type of repair.

City Council Resolution 29911

After considerable inventory and policy work over more than twenty years, the city took positive legislative and funding action in 1999. On April 12, 1999, the Seattle City Council passed Resolution 29911 to develop an areaway repair/maintenance program and establish financing guidelines and criteria under the City's Hazard Mitigation Program. This resolution led to the

current study being conducted.

The resolution calls for the following steps:

- Developing a prioritized list of areaways needing repair;
- Working with the Pioneer Square Preservation Board to determine what aspects of an areaway need to be preserved under the City's historic preservation ordinances and the adopted 1990 Pioneer Square Plan;
- Determining the feasibility and costs of completing repairs and/or filling them with lightweight concrete;
- Negotiating with building owners the respective responsibilities of the City and the owners; and,
- Designing a program, funded by permit fees, to inspect all areaways on a regular basis to determine condition, use and need for repairs.

The resolution provided that, in order to protect public safety, the City could undertake repairs to some areaways in Pioneer Square in 1999 without completing all of the steps outlined above. However, the City was to coordinate its work with interested property owners, neighborhood groups, and the Pioneer Square Preservation Board, including obtaining the required Certificates of Approval for any alteration made in the public rights of way in the District.

The resolution also provided guidelines for payment for repairs:

- The city will pay the cost of filling an areaway with lightweight concrete, where use is not an issue.
- If the property owner wishes to continue to use the areaway, and repair costs are greater, the city may pay the amount equal to filling, with the property owner paying the remainder.
- Where the repair is more costly due to historic rehabilitation standards outlined in the updated 1990 Pioneer Square Plan that restrict encroachment that would result from filling the areaway, the City and the abutting property owner may share the costs of this repair;
- Where there are utilities in the areaway or a utility desires access or use, the utility may pay for the costs of moving, stabilizing or installing their facilities, or any incremental cost of the repairs caused by their presence or use.

The process identified in Resolution 29911 resulted in identification of appropriate repairs on a case-by-case basis, weighing structural deficiencies and historic significance with other factors. The information collected during the 2000-2001 structural and historic assessments, discussed in this report, was used to identify the best repair approach for each critical areaway. The recommended repairs, in some cases, vary from the broader recommendations in the 1990 Pioneer Square Plan Update, described above. Upon inspection of the historic elements, it became clear that in many cases the most important feature was the building wall, while the deck and street wall had often been altered. Therefore, filling a portion of the areaway adjacent to the street wall, leaving the building wall freestanding, would, in many buildings, stabilize the sidewalk and street wall while preserving the important historic elements. Use of this approach where possible will make more funds available for those areaways where the historic features or overall importance of the space means that reconstruction is necessary.

KEY ELEMENTS OF THE AREAWAYS

An areaway is defined as the space directly below the sidewalk, between the building wall and the street wall. In some older Pioneer Square buildings, the areaways were created when the city raised the level of the streets in rebuilding after the Great Fire of 1889. Buildings constructed in Pioneer Square in later years followed this pattern, typically constructing areaways to provide additional space. Areaways vary in size, but are typically ten feet high and ten feet wide, running the length of the building.

The 1990 Pioneer Square Plan summarizes the key characteristics of the areaways in these words:

The most significant qualities of an areaway are the architectural features which render its form, character, and spatial quality. The use of unit materials, articulated bays, ceiling vaults, and other architectural features typical of the period in above grade construction are also significant determinants of architectural merit within the areaways.

There is a strong correlation between the age of an original structure and the type of architectural features present in the adjoining areaway. In general, the oldest areaways are constructed with brick vault ceilings, prism lights, and brick or stone walls. The next oldest are constructed with concrete arch ceilings, prism lights, battered concrete street walls, and concrete end walls. The most recent areaways are generally beam and slab deck construction with concrete areaway walls and pierced building walls.

This summary corresponds with what was seen in the inventory, as noted on the matrix in Appendix C. Further details on the key physical elements are described below.

- Decks or Ceilings: These structures support the sidewalks, originally resting on steel I-beams that span from the street wall to the building wall, as required in the original ordinances. These original beams are universally corroded and many have been replaced with newer steel beams or reinforced concrete structures.

In early post-fire buildings, the deck was of vaulted arches made of red brick, repeating to form the ceiling of the areaway. Many of these original brick arches are still found, but others have been reinforced in some way with concrete. Over the past thirty years, a number of failing brick structures have been replaced with new concrete arches or with concrete slabs; sometimes concrete may have simply been placed over the brick. In 20th century buildings the arches were often built of concrete. It is often difficult to determine whether the concrete arches are original construction or newer additions.

- Street Walls: These were typically made of brick or rubble (irregular stone), or concrete in later years. These walls retain soil beneath the street, thus supporting the street itself. Some have been replaced by concrete, particularly in cases where major building rehabilitation has been done. Again, in newer buildings (after about 1908) concrete may be the original material.

- **Building Walls:** Of all the elements, building walls have the greatest amount of variety. In early years they were of brick or stone. The appearance was almost always fairly rough in comparison to the main facade above. Often, arched doorways (and sometimes windows) lead from the areaway into the basement. Some of these arches have been filled with concrete, for seismic reinforcement, or covered with wood.

In some cases there is no building wall, leaving the existing basement open to the areaway. In these cases the building edge is typically defined by brick or stone columns, often with arches in between. In some cases where major rehabilitation has been undertaken, steel columns have been installed.

- **End or Partition Walls:** The walls at the ends of each areaway are typically of brick, sometimes of stone rubble or concrete. They are not necessarily the same material as the building wall or the street wall; many buildings combine two or three materials. The partition walls, which divide larger areaways into sections, were also typically of brick or rubble, and one building may have two or three materials in different sections.
- **Skylights:** Prismatic skylights were originally a crucial part of the areaways, providing natural light to the underground space. They are also usually the only portion of the areaways (other than stairwells) noticeable to the passerby. However, skylights are very vulnerable to damage from moisture, foot traffic, vibration and other factors, and the great majority of them have been filled in. Some have been replaced with more modern glass and frames, yielding a different appearance but still maintaining the original function. Only a small number of the original skylights remain, in generally poor condition.

STRUCTURAL INVENTORY METHODOLOGY

The areaways were visually inspected to assess the structural condition of its various elements. The historical features of the areaway, areaway usage and the condition of the sidewalk were also noted. An inventory of the elements of the areaway was performed. The dimensions (length, width and height) of the areaway were measured. The spacing of beams and columns in the areaways was noted to develop a layout plan for the areaway.

Structural Deficiencies

The two most commonly observed deficiencies were corrosion of the steel I-beams and settlement and/or rotation of the street wall. Lack of corrosion protection in the original steel beams and poor soil conditions are the respective causes of these deficiencies.

Some of the other deficiencies observed are cracks in street walls, building walls, or end walls; deterioration of mortar in brick and stone walls and brick arches; damaged skylight panels; and loose stones in rubble walls.

Failure and Consequences

If an I-beam supporting a sidewalk were to fail, the brick arch and the concrete sidewalk slab above it would collapse, with little or no warning. Such a collapse would pose a significant danger to pedestrians.

Another failure scenario involves the street wall. If a street wall rotates sufficiently either towards the building or away from it, the sidewalk beams lose their support, resulting in the collapse of the sidewalk. If the street wall rotates sufficiently toward the building, the wall itself may collapse, causing the soil behind it to cave in and resulting in the collapse of the street and damage to underlying utilities.

Less catastrophic failure of individual elements of an areaway can also pose hazards to the public. These may require closure of traffic lanes or the sidewalk or weight limitations. For example, collapse of a skylight panel may necessitate putting barricades on the sidewalk for pedestrian safety.

Structural Ratings

The individual elements of each areaway are assigned an Adjective Rating as defined in the Definition of Terms (Appendix A), developed by City. The Adjective Rating categories are Good, Fair, Poor and Critical. Based on this rating, the element is assigned a numerical rating of its condition, expressed as a percentage. An Adjective Rating of 'Good' translates to a numerical percentage rating of between 80 and 100. Similarly, 'Fair' translates to a numerical rating between 50 and 80; 'Poor' translates to a numerical rating between 30 and 50; while 'Critical' translates to a numerical rating between 0 and 30. The ratings of the individual elements were entered into the City's computer rating program along with the weight factor given to each element. The weight factor represents the significance of the element in relation to the areaway. The computer program calculates the weighted average rating of the areaway. This rating is termed as the General Condition Rating and is an assessment of the overall structural condition of the areaway (Appendix B).

Prioritized List of Areaways in Need of Repair

Areaways with a General Condition Rating below 60 per cent are considered structurally critical and in need of repair. A repair priority is developed for those areaways that are in need of repair. The list, in Appendix D, includes all areaways with a rating of 65 or lower, as it is assumed that those rated at 65 may be deteriorate to 60 over the next five years.

"Structurally critical" is defined as the state in which there could be partial or full collapse of the areaway or one of its elements if the sidewalk were fully loaded with pedestrians or if there were to be a heavy load like a delivery truck being parked partially on the sidewalk. An earthquake of moderate to high magnitude may also cause soil liquefaction leading to excessive settlement and tilting of street walls or end walls. This overstresses the walls further, leading to cracking and loss of sidewalk support.

The following criteria (in approximate order of importance), identified in Resolution 29911, were used to prioritize the areaways in need of repair:

- 1) public safety and the risk to the traveling public and adjacent properties;
- 2) volume of traffic and pedestrian use and important utility facilities;
- 3) historical significance in terms of use or architecture;
- 4) current use;
- 5) community priorities as identified in the neighborhood plans;
- 6) importance to local development;

- 7) efficient use of limited city resources;
- 8) other factors that may be identified by the community, the Preservation Board or the City.

Each of these criteria is explained further below:

- 1) The structural rating is the primary determinant of public safety, as it measures the potential risk to the traveling public and the adjacent properties. The structural repair order is based on the structural ratings.
- 2) The rating for volume of traffic and pedestrian use was taken from the Mayor's Recommended Pioneer Square Plan, 1990, "Pedestrian Street Classifications." The presence of important utilities in or adjacent to an areaway increases the repair priority because the failure of an areaway or one of its elements could jeopardize the utility service, potentially causing harm to the property owners, tenants, neighboring buildings and businesses, pedestrians and vehicle traffic.
- 3) The process for identifying historical significance is described in the following section of this report. The ratings are in Appendix C. The presence of historical elements defines the method of repair to be implemented in an areaway, in order to preserve the significant features.
- 4) Current use of an areaway by abutting property owners is one factor weighed in evaluating the method of repair, but is not the decisive factor.
- 5) Evaluating the need to repair an areaway based on other neighborhood plans.
- 6) Assigning priority for repair with consideration to local, private or public development being planned.
- 7) In order to use city resources efficiently, an areaway would be placed lower on the repair priority list if the cost of repair would exceed the cost to repair several other areaways that are of equal or worse structural condition.
- 8) Considering any other relevant criteria that may be associated with the community or City policies.

The Prioritized List of Areaways in Need of Repair tabulates the above criteria as applicable for each areaway. The Overall Repair Priority is derived from a combination of the above criteria. The structural repair order is modified based on the Pedestrian Use Rating, location of Utility Facility, cost of repair, and other Relevant Criteria, to yield the Overall Repair Priority.

HISTORIC RESOURCE ASSESSMENT

The assessment of the historical elements of the areaways began with the compilation of information collected in the 1999-2001 structural survey. These engineering inspections did not specifically note all historic features, but did note the materials used in walls and deck of each areaway; photographs were taken for many of the spaces. This information was used to identify those areas that had been significantly altered, or that retained primarily original materials. A

historian inspected approximately 40 per cent of the properties to look specifically at the historic features. This information was used to develop the list of key historic elements and the rating system.

Historic Features

The typical historic features of an areaway in an older building, as described in earlier plans, are:

- A building wall, originally of brick, rubble or stone;
- A wall supporting the street, usually originally of brick or rubble;
- A ceiling or deck supporting the sidewalk, originally of brick arches supported by steel beams;
- End walls and dividing walls (also called fire walls), originally of brick or rubble.

In addition to these typical features, some buildings have other characteristics, such as:

- windows or doorways, often arched, in the building wall, connecting the areaway to the building basement;
- skylights;
- decorative tiled floors;
- building walls with curves or pilasters; or
- decorative columns in place of a building wall, where the areaway is integral with the basement.

The rating system has four categories based on the degree to which the historic integrity of these features remains.

- All four of the key surfaces are substantially unaltered; *or*, the features as they are provide a strong sense of place, *or*, unusually significant features are present (such as tilework).
- Two or three of the key surfaces are substantially unaltered and the areaway as a whole retains a sense of place;
- Significant alterations have occurred to the features, but some sense of place remains;
- Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains, or the areaway has been filled.

Summary of the Historic Inventory

- The 110 Pioneer Square properties with areaways can be divided into three types, based on materials used.
- About 15% of the properties appear to have largely original materials, the brick and stone that were typical of buildings built shortly after the 1889 fire.
- Approximately 50% are primarily brick or stone, but with some concrete reinforcement. Typically, there are concrete arches or other reinforcement of the sidewalk deck. In some cases, concrete has been used to reinforce or replace the building wall or street wall. In some cases, concrete may have been an original material.

- About 35% are all, or primarily, concrete. This includes older buildings with original concrete (which became common in larger buildings by 1910), major rehabilitation projects where the areaway was rebuilt to non-preservation standards, and newer non-contributing buildings with original concrete (such as the Olympic Building).
- Another typology of areaways is their current use. While complete information on use is not available, it appears that most areaways are not formally used—they are either totally vacant or are used for informal storage of discarded items.
- Usage depends on many factors, including the amount of dampness, the extent to which the space has been improved, and the type of business in the building. Many areaways have dirt floors, which makes them unsuitable for most uses.
- Probably 75% of the areaways contain utility pipes, wiring, meters, alarm systems, or similar infrastructure elements.
- In about 15% of the properties the areaways are integral to the basement, which may be used for storage or as a store, restaurant, health club, parking garage or other active, formal use; in these cases, no building wall separates the areaway from the basement.
- A considerable number are used for organized storage, such as for restaurant supplies or retail stock.

The most common alteration that has been found is replacing, covering or filling original brick or rubble features with concrete. Two questions arise with those places that have concrete: how extensive and intrusive the concrete is, and whether or not the concrete is the original historic material (its use began in the early 1900's).

- Approximately 30% of the areaways have been rated as the most historically intact and significant (1). Typically, these have an arched brick deck and street walls, building walls and end walls of brick or stone. Many have arched doorways or window openings in the building wall. Some have stone building columns or special features such as tile flooring. These characteristics are most commonly found in older buildings (c. 1889-1900) near First Avenue or Occidental Avenue.
- Approximately 35% of the areaways are rated 2. These are primarily older buildings that retain some brick or stone walls or decking; however, one or two of the elements have been covered or replaced with concrete. They may also have special features, usually arches in the building wall.
- About 15% areaways are rated 3. These have been significantly altered, with significant amounts of concrete surface. Many of these are newer structures (post-1900) or major rehabs (Grand Central, Seattle Quilt, Seattle Hardware). They tend to be at the eastern or southern edges of the Pioneer Square area.
- Finally, 18% of the areaways are rated 4. This includes six that have been filled. The

others are either new construction (Olympic Building) or have been completely altered through rehabilitation, such as the Alaska Building, NBBJ and Merrill Place. They retain little or no sense of historic character.

Nothing here should be considered a reason in itself to fill or reduce the historic integrity of any areaway. Before any action is taken, the areaway should be thoroughly evaluated, to identify its historic characteristics and compare them to others, as indicated in the report. This report is not to be used by itself to justify the filling or significant alteration of key features of any areaway. Before any such changes are made, a thorough study of the specific areaway is needed. This report provides the context and background information for that specific study and decision-making.

COMMUNITY INTERVIEWS

The historic resource assessment began with interviews to identify the level of community awareness about the areaways, possible concerns about potential structural safety problems and suggestions for informing and involving the broader Pioneer Square community in discussion about areaway policies and repairs. Ten interviews were conducted in July-September 2000 with city staff members involved with Pioneer Square, major property owners and managers, and business/community representatives. People interviewed were:

Jennifer Meisner, Pioneer Square Preservation Board staff
John Eskelin, City Department of Neighborhoods
Sunny Speidel and Steve Crosier, Underground Tours
Jody Eakins, Pioneer Square Business Improvement Association
Debra Cushing, Pioneer Square Community Development Organization
Kevin Carl, Public Spaces Forum/Pioneer Square Community Council
Adam Hasson, Samis Land Company
Greg Coleman, Martin Smith, Inc.
Rosemary Rice, Pioneer Square Properties
Shannon Yates, No Boundaries, Ltd.

Property managers interviewed were generally knowledgeable about the areaways adjacent to their buildings and with the recurring issues of maintenance and repair. Many of these buildings had been rehabilitated over the past two decades and the areaways were typically well maintained.

Historically, the major barriers to repair and maintenance of the areaways have been the high cost involved and disagreement about whether the city or the property owner should pay for it. These subjects were explored in the interviews; some respondents felt that since the areaways are city property, the city should pay for maintenance and repair. Other property owners were willing to share in costs. One person cited an example where they sought city participation, but the areaway was not considered critical enough for partial city funding. Another problem often encountered by those who undertake areaway or sidewalk improvements is uncertainty within the city itself regarding who is responsible for permitting and what the relevant policies are. Some mentioned that one factor in determining payment should be the cause of the problem, whether deficiencies are due to owner neglect or city actions. It was pointed out that some city involvement is crucial, as the cost of filling an areaway is more than many small property owners can afford, and reconstruction of historic features would be prohibitive for most owners.

Although filling is often the lowest-cost solution to solving structural problems, it was not necessarily seen as the best approach. Most owners would prefer to see potentially usable space preserved if possible.

Community representatives identified their main concerns relevant to this topic as being with the pedestrian environment, particularly with street trees and sidewalk paving (including hazard and appearance issues). They recognized and valued the underground tours and their continued use of the areaways. They expressed little awareness of the potential public safety danger of structurally deficient areaways. They agreed with property owners/managers, however, that potentially usable spaces should be preserved where possible.

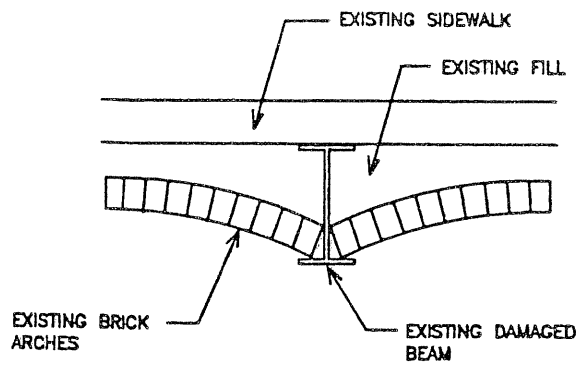
The interviews conducted in late summer of 2000 were rendered largely moot by the earthquake that occurred on February 28, 2001. The severe damage to many Pioneer Square buildings overwhelmed concerns about areaways. Seattle Transportation and consultant efforts turned to working with federal agencies to obtain funds for repair of earthquake damage to both streets and areaways. Public involvement regarding repair options for the damaged areaways focused on the Pioneer Square Preservation Board, rather than on with community organizations as had originally been envisioned.

VIDEO

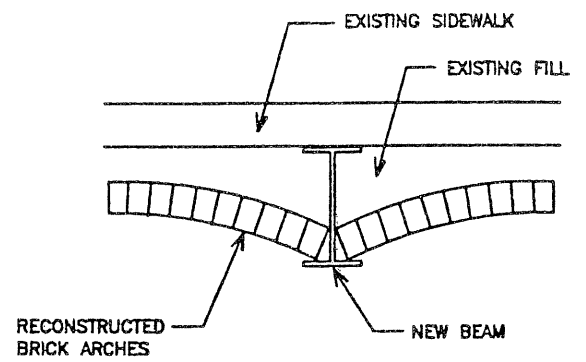
A video describing features of this report was also made to help preserve findings of this study and illustrate historical elements.

AREAWAY SURVEY MAP

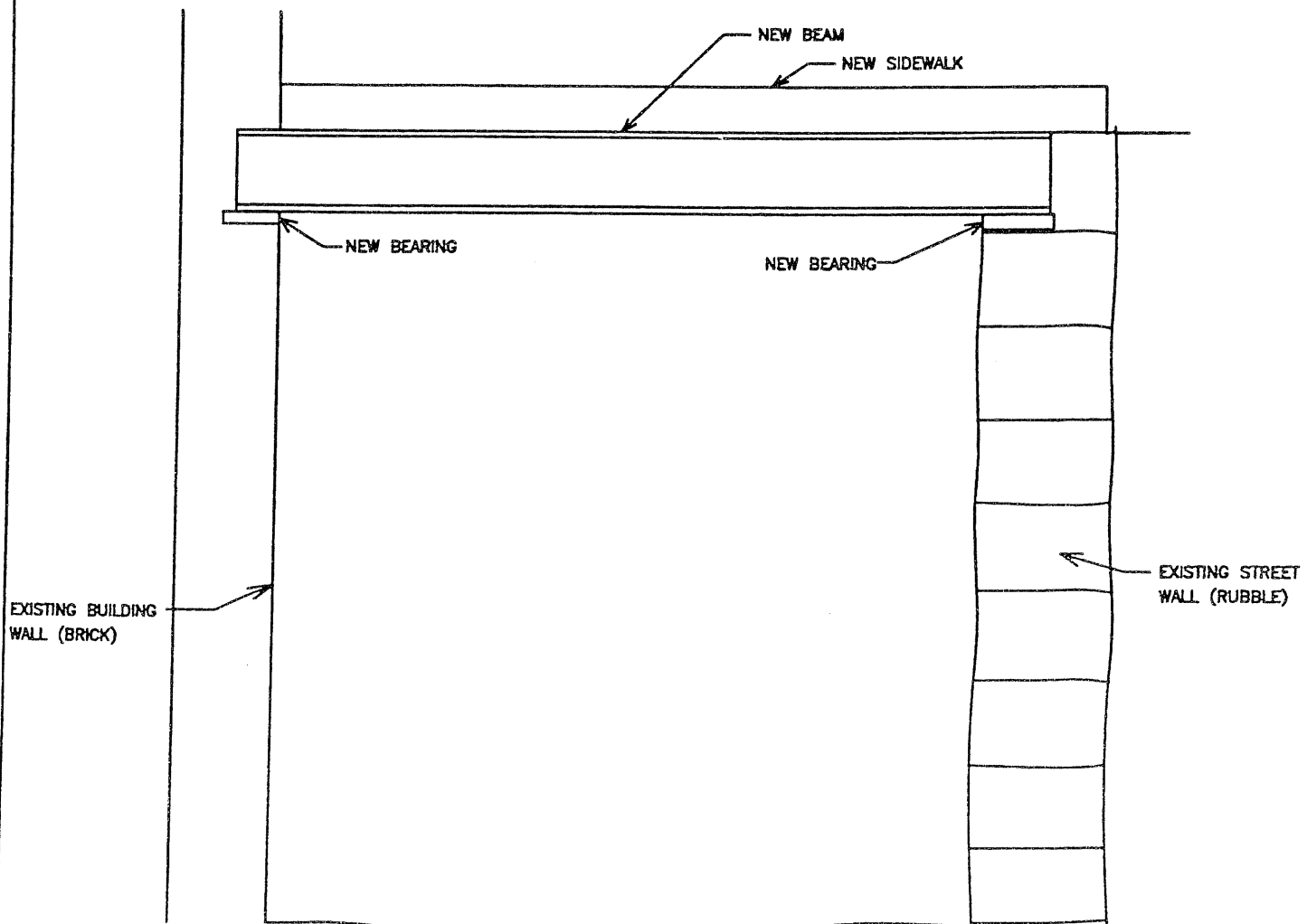
A color coded map of all areaways in Pioneer Square Historic District was developed with the structural ratings translated into color codes and historical ratings translated into color coded numbers. It is given in Appendix E.



EXISTING CONDITION

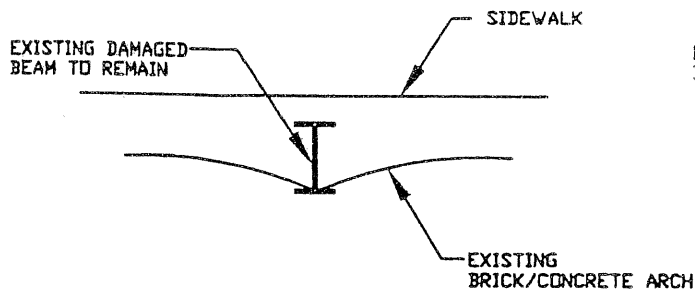


REPAIRED CONDITION

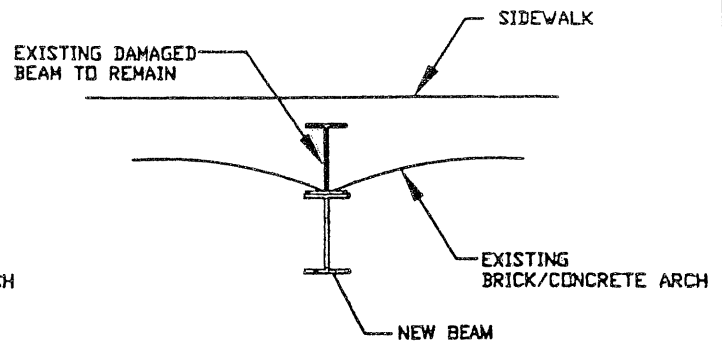


RECONSTRUCTION WITH BEAM REPLACEMENT

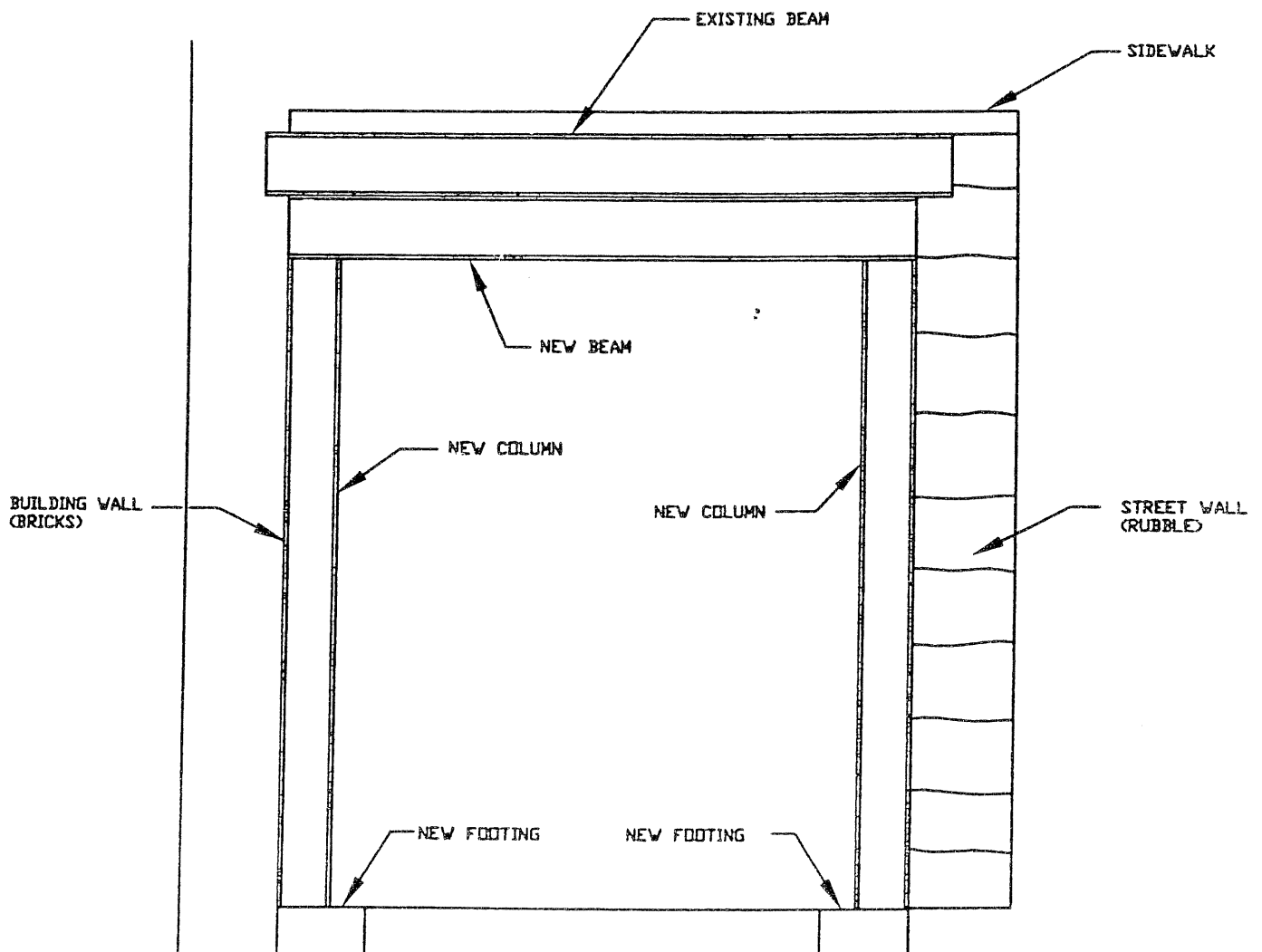
FIGURE 1



EXISTING CONDITION

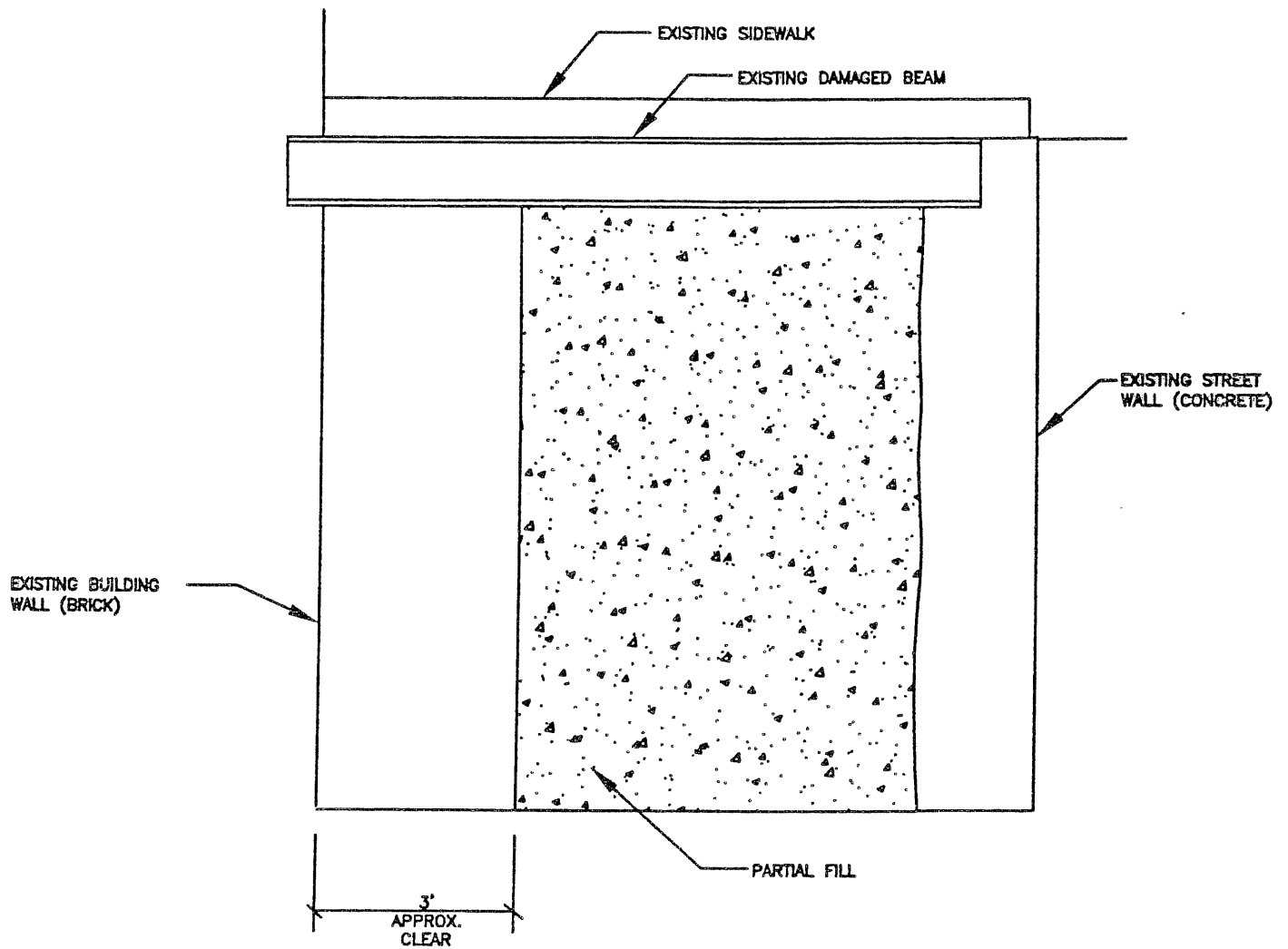


REPAIRED CONDITION

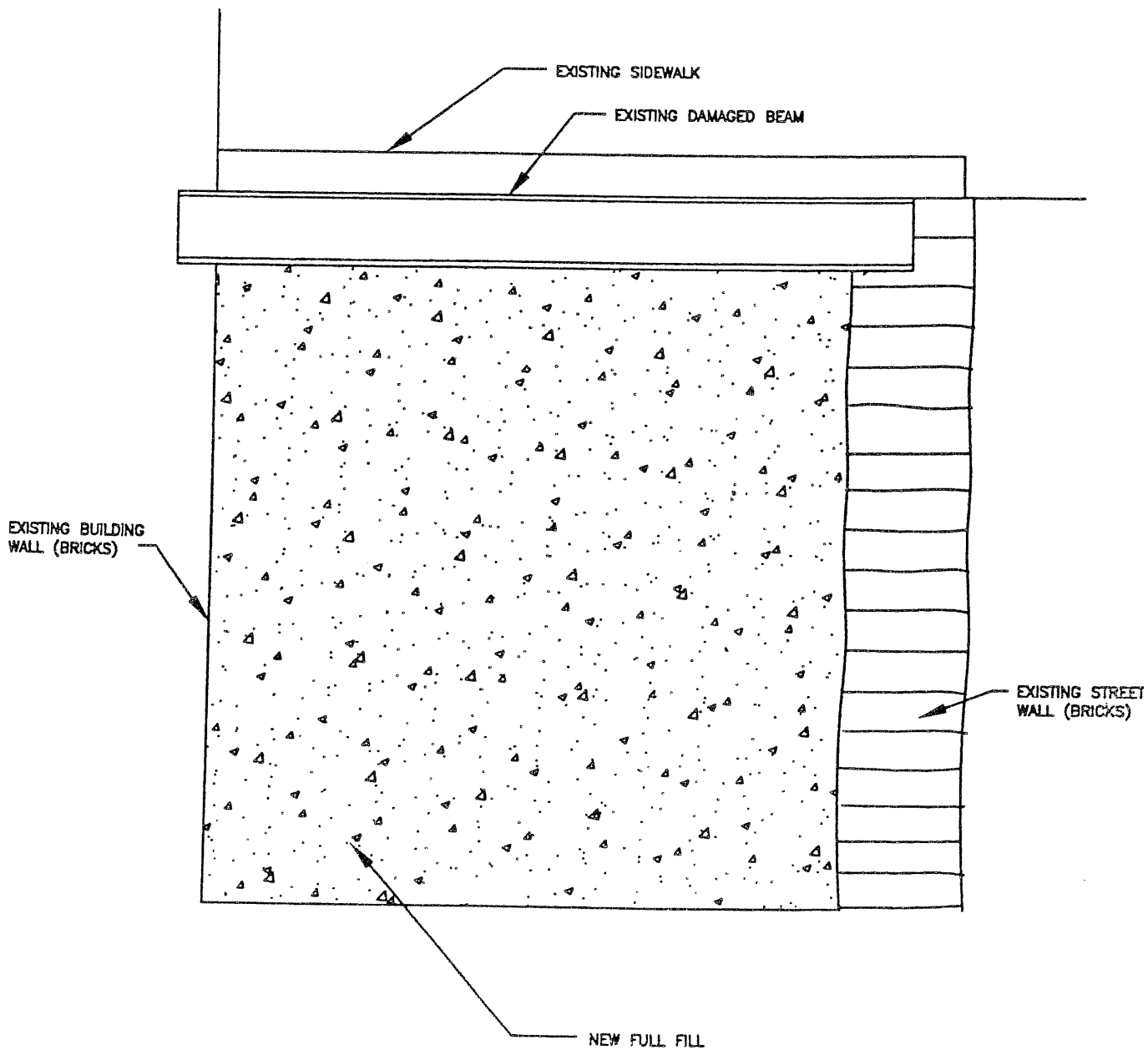


NEW SUPPORT BEAM/COLUMN

FIGURE 2



PARTIAL FILL
FIGURE 3



FULL FILL
FIGURE 4

DEFINITION OF TERMS

Adjective Rating: (Numerical Percentage Rating)

Good, Fair, Poor and Critical Ratings are used to describe the individual member condition.

It is important to note that only the visible side of the member could be rated since no materials were sampled or tested, nor was sub-surface information gathered. Example—If only the bottom flange of a steel beam is exposed, the rating is based on the condition of the bottom flange. It is assumed that the encased portions of the steel beams are in better condition due to less exposure to oxygen and moisture.

Good: (80-100)

The member referred to is free from significant defects. Loss of metal due to corrosion is less than 10% based on the visible portion of the steel beam. Cracks in walls, floors, and decks are haircracks and considered of no concern structurally.

Fair: (50-80)

No major deficiencies, loss of metal or steel due to corrosion, may be up to 25% less than the original thickness; based on the visible portion of the steel beam. If possible, measurements are taken to determine the original thickness and indicated on the individual areaway sheet. Cracks in walls, floors and decks do not exceed ¼ inch but are not considered structurally deficient.

Poor: (30-50)

Major deficiencies are evident. Loss of metal may be up to 50% less than originally, based on the visible portion of the steel beam.

Cracks in walls, floors and decks up to 1 inch. Differential settlement shall not exceed ½ inch.

Critical: (0-30)

Loss of metal exceeds 50% or includes rusted-through portions on the visible portion of the steel beam. Cracks exceed 1 inch differential; settlement exceeds ½ inch, and/or structural walls or support indicate evidence of significant structural inadequacy.

APPENDIX B

SEATRAN AREAWAYS

GENERAL CONDITION RATINGS

Updated: 6/28/2002

	AREAWAY NUMBER	AREAWAY STRUCTURAL RATING			REPAIR STATUS/PRIORITY
		AREA A	AREA B	AREA C	
	201	76.67			
	202	62.50			
	203	86.84	80.00		
	204	75.00			
	301	66.67	66.67		
	401	76.00	76.00		
	402	81.03			
	403	83.33			
	404	75.00			
	405	72.92	72.92		
	406	66.67	61.46		
	407	81.25			
	501	81.25			
	502	71.87			
	503	75.00	81.90	81.90	
	601	77.08	69.79	58.33	reconstruct 6/02
	701	72.92			
	702	80.21			
	801	72.92			
	802	70.83	70.83		
	803	72.92			
	804	72.92			
	805	72.92	72.92		
	806	81.25			
	901	95.00	94.74		
	902	74.00			
	903	68.75			
	904	Filled			
	905	Filled	Filled		
	906	46.00			
	907	52.00			
	908	75.00	49.00		
	909	62.00			
	910	64.00			
	911	64.58	79.17		
	912	60.42			
	913	75.00			
	1001	77.59	66.67		
	1002	73.96	48.75		
	1003	22.00			fill 7/02
	1004	73.44			
	1005	67.50			

APPENDIX B**SEATRAN AREAWAYS****GENERAL CONDITION RATINGS**

Updated: 6/28/2002

	AREAWAY NUMBER	AREAWAY STRUCTURAL RATING			REPAIR STATUS/PRIORITY
		AREA A	AREA B	AREA C	
	1101	60.42			
	1102	74.00			
	1103	54.17			
	1201	75.00	66.67		
	1202	72.92			
	1203	65.62			
	1204	70.83			
	1205	70.83			
	1206	70.83	70.83		
	1301	80.00	62.00		
	1302	68.75			
	1303	77.50	70.00	65.36	
	1401	Filled			
	1402	83.33			
	1403	Filled	45.28		
	1404	Filled			
	1501	Filled	Filled	Filled	
	1601	63.54			
	1602	81.25			
	1603	69.81	72.92		
	1604	75.00			
	1701	83.33	83.33		
	1702	77.08			
	1703	77.08			
	1704	83.33			
	1705	83.33	80.00		
	1801	76.04	76.04		
	1802	72.92			
	1803	81.25	81.25		
	1804	81.25			
	1805	70.00	66.67		
	1806	77.08	70.83		
	1807	80.00			
	1808	81.25	70.83		
	1809	80.00			
	1901	84.37	71.87		
	1902	79.17	79.17		
	1903	65.00	77.08		
	1904	78.95			
	2001	64.58	70.83	78.02	
	2101	68.75			
	2102	83.33			

APPENDIX B					
SEATRAN AREAWAYS					
GENERAL CONDITION RATINGS					
Updated:	6/28/2002				
	AREAWAY NUMBER	AREAWAY STRUCTURAL RATING			REPAIR STATUS/PRIORITY
		AREA A	AREA B	AREA C	
	2103	66.67			
	2201	77.08	83.33		
	2202	72.92	56.25		reconstruct 6/02
	4000	84.48	83.82		
	5000	58.33			
	5001	61.20			
	5002	60.42			
	5003	61.46			
	6000	38.00			
	6001	66.67			
	6002	30.00			fill 7/02
	6003	29.17	27.08		fill 7/02
	6004	56.90			fill 7/02
	7000	70.83			
	7001	78.95			
	8000	52.08	77.08		
	8001	70.83			
	8002	79.17			
	8003	55.00			
	9000	95.00			
	9001	68.75			
	9002	77.08			
	10000	72.92	72.92		
	10001	72.92			
	10002	72.92			
	10003	68.75			
	10011	90.62	90.62		
	10012	85.42	85.42	91.67	
	10013	45.83	83.33		
	10014	80.00			

APPENDIX C: PIONEER SQUARE AREAWAYS HISTORICAL RATINGS MATRIX

July 2002

SDOT # ¹ PSHD #	Address	Historic Name Common Name Construction Date/Historic Significance ²	Historical Significance Rating ³	Notes
201 25	627 1 st	Pioneer Drug (secondary)	1	
202 26	625 1 st	Emerald City (secondary)	1	
203 29	92-94 Yesler 695-1st	Mutual Life (1890, 1903, primary)	2	toy store; rehabbed 1983; some surfaces covered
204 28	88-90 Yesler	Post Hotel (primary)	2	restaurant
301 52	102-18 Cherry; 700-06 1 st	Scheuerman 110 Cherry (1890, primary)	1	restaurant storage
401 53	103-07 Cherry	Lowman United Way (1906, primary)	4	storage

¹ The first number is that assigned during the structural inspection; this number is keyed to the accompanying map. The second number is that assigned in the Pioneer Square Historic District nomination forms.

² The National Register landmark district nomination forms for Pioneer Square designate four levels of significance for buildings. The properties most significant to the history of the district are "primary" and those of lesser significance are "secondary." When the district was expanded to the east, with more post-1900 buildings, the less significant ones were designated "tertiary." Newer construction and buildings that have been severely altered are given the designation "intrusion." Areaways may have greater or lesser significance than the building itself.

³ Ratings are on a scale of 1 to 4, with 1 being the most historically intact and significant areaways. Those areaways rated 4 have been filled or significantly altered.

SDOT # PSHD #	Address	Historic Name Common Name Construction Date/Historic Significance	Historical Significance Rating	Notes
402 54	616 1 st	Lowman & Hanford (1889, primary)	2	underground tour rehabbed 1981
403 55	612-14 1 st	Howard (1890, primary)	1	underground tour
404 55	612-614 - 1 st	Howard (primary)	1	underground tour
405 56	602 1 st	Pioneer (1888-91, primary)	1	underground tour rehabbed 1973-75
406 75	601-11 2 nd	Butler (1889-90, secondary)	2	
407 74	615-19 2 nd	Bailey/Broderick (1889-91, primary)	2	storage
501 112	618 2 nd	Alaska (1903-04, primary)	4	rehabbed 1982; mostly finished space
502 113	606-10 2 nd	Corona Hotel (1903, secondary)	4	rehabbed 2000
503 114	600 2 nd	Hartford (1929, secondary)	3	
601 76	515 2 nd	2 nd & James Garage (c. 1961, intrusion)	1	tile floors from earlier hotel
701 115	520-24 2 nd	Collins (1893, primary)	2	rehabbed 2000
702 117	502-08 2 nd	Smith Tower (1914, primary)	2	rehabbed 1999; health club
801 31	89-93 Yesler 103-07 1 st S.	Schwabacher (1890, 1892, primary)	1	underground tour

SDOT # PSHD #	Address	Historic Name Common Name Date/Historic Significance	Historical Significance Rating	Notes
802 30	95-99 Yesler	Yesler/Bank of Commerce (1890, 1904, primary)	1	underground tour
803 31	103-07 1 st S.	Schwabacher (1890, 1892, primary)	1	underground tour
804 32	109-15 1 st S.	Northern Hotel Terry-Denny Building (1889, primary)	1	underground tour rehabbed 2000 northern portion integral with basement
805 33	117 1 st S.	Maynard (1892, primary)	1	rehabbed 1975
806 10	68-74 S. Washington	L & H Printing (intrusion)	3	
901 none	100 1 st S.	Olympic Building (1985, intrusion)	4	
902 61	106-08 1 st S.	Lippy/Kind (1902, primary)	3	rehabbed 1985
903 62	110-12 1 st S.	City Club (1889/1898/1905, primary)	2	rehabbed 1985
904 63	114-20 1 st S.	State Hotel New Orleans (c. 1890, primary)	4	filled
905 63	114-20 1 st S.	Delmar (c. 1890, primary)	4	filled
906 82	116 S. Washington	Laguna Pottery (secondary)	2	small areaway
907 83	118 S. Washington	Interurban Hotel Cowri (intrusion)	2	

SDOT # PSHD #	Address	Historic Name Common Name Date/Historic Significance	Historical Significance Rating	Notes
908 83	173 S. Washington	Interurban Hotel Last Supper Club (intrusion)	2	
909 81	115-17 Occidental S.	(intrusion)	3	underground tour
910 80	107-09 Occidental S.	Saveway Market (secondary)	1	underground tour
911 79	101 Occidental S. 119 Yesler	Korn (1890, secondary)	2	underground tour
912 78	111 Yesler	Eagle Café Bohemian (secondary)	1	
913 77	109 Yesler	Merchants Café (secondary)	2	restaurant; partially covered with new brick
1001 92	102-08 Occidental S.	Interurban Building (1890, primary)	1	
1002 102	401-07 2 nd S.	Barney's (intrusion)	3	
1003 100	411 2 nd Ave. S.	(intrusion)	3	
1004 99	417 2 nd Ave. S.	(primary)	3	
1005 98	421 2 nd Ave. S.	Metropole (secondary)	1	
1101 119	201-09 Yesler	Campbell & Fuller (secondary)	2	
1102 122	404 2 nd Ave. S.	(primary)	3	
1103 123	400 2 nd Ave. S.	(primary)	2	integral with basement

SDOT # PSHD #	Address	Historic Name Common Name Date/Historic Significance	Historical Significance Rating	Notes
1201 35	201-05 1 st S.	J&M Hotel & Café (1890, secondary)	1	
1202 36	207 1 st S.	Skagit Building Central Tavern (secondary)	1	storage
1203 37	209 1 st S.	Marathon Building Larry's Greenfront (secondary)	1	
1204 38	211 1 st S.	Pioneer Square Rug	1	
1205 39	213-15 1 st S.	Luck Hotel (1889, secondary)	1	
1206 40	217-19 1 st S.	New England (secondary)	1	music studio
1301 64	204 1 st S.	Buttnick (secondary)	2	corner arches filled w/concrete; skylight
1302 65	206 1 st S.	City Loan (1903, secondary)	4	rehabbed 1975
1303 66	208-20 1 st S.	Squire-Latimer Grand Central (1889, secondary)	3	rehabbed 1971-73
1401 106	213-17 2 nd S.	Ruggles/Lucknow Waterfall Place (1900, secondary)	4	filled rehabbed 1984
1402 105	207-11 2 nd S.	Leroy Hotel Norberry Tile (1889/1949, intrusion)	4	filled

SDOT # PSHD #	Address	Historic Name Common Name Date/Historic Significance	Historical Significance Rating	Notes
1403 104	171-73 S. Washington	McCoy's Firehouse (secondary)	2	Washington St. section filled
1404 103	167-69 S. Washington	(intrusion)	4	filled
1501 124	2nd Ave. S. & Washington	Apex (secondary)	4	filled
1601 127	211-15 S. Washington	(intrusion)	3	
1602 28x	312-18 2 nd Ave. S. Ext.	Union Gospel Mission (secondary)	4	
1603 128	219 S. Washington	Union Gospel Mission Hotel (1904, secondary)	1	
1604 129	219-21 S. Washington	Union Gospel Mission Café (primary)	2	
1701 41	301 1 st S.	Matilda Winehill Block Bread of Life Mission (1890, primary)	1	
1702 43	309 1 st S.	Maud (1889, primary)	2	rehabbed 1970
1703 44	313 1 st S.	Crown Hotel Carolyn Staley (1890, secondary)	1	rehabbed 1971
1704 45	317 1 st S.	Squire (1900, secondary)	2	
1705 46	321 1 st S.	Smith (1900, secondary)	1	used for parking
1801 67	300-04 1 st S.	Globe Elliott Bay Books (1890, primary)	1	rehabbed 1965 restaurant, storage integral with basement

SDOT # PSHD #	Address	Historic Name Common Name Date/Historic Significance	Historical Significance Rating	Notes
1802 68	306-10 1 st S.	Globe Hotel (1898, primary)	1	
1803 69	312-14 1 st S.	Nord Hotel (1890, secondary)	1	rehabbed 1979
1804 70	316 1 st S.	Walker Seattle Quilt (1904, secondary)	3	used for parking rehabbed 1982
1805 71	322-24 1 st S.	Capitol Brewing Co. Flury & Co. (1900, primary)	3	rehabbed 1963
1806	122 S. Jackson	Scientific Temple Billiards	2	integral with basement
1807 88	311-13 Occidental S.	Waltham (1890, secondary)	2	arches very low, floor built up; restored as part of Occidental Mall; exterior stair
1808 87	119 S. Main 301-09 Occidental S.	Union Trust (1893, primary)	2	mostly finished space, intact but covered
1809 86	115-17 S. Main	Union Trust Annex (1902, primary)	2	mostly finished space, intact but covered
1901 95	300-310 Occidental S.	State Bank of America (1890, secondary)	1	bank vault in areaway
1902 96	314-22 Occidental S.	Sportcaster (secondary)	1	
1903 110	319-23 2 nd Ave. S.	Cadillac Hotel (c. 1889, secondary)	3	
1904 109	315 2 nd Ave. S.	Duncan & Sons (1900, primary)	4	

SDOT # PSHD #	Address	Historic Name Common Name Date/Historic Significance	Historical Significance Rating	Notes
2001 47	401 1 st S.	Pacific Marine Schwabacher Merrill Place (1905, primary)	4	rehabbed 1984
2101 72	101 S. Jackson	Wax & Raine NBBJ/Heritage Building (1904, secondary)	4	rehabbed 1982 largely inaccessible
2102 91	123 S. Jackson	Foster White (secondary)	4	tunnel to 2103 at south end
2103 44x	419 Occidental S.	McKesson & Robbins F. X. McRory's (1907, primary)	4	tunnel to 2102
2201 97	400-10 Occidental S.	Washington Shoe Manufacturing (secondary)	2	rehabbed 2000
2202 111	165-73 S. Jackson	North Coast Electric Court in the Square (1900, secondary)	2	rehabbed 1985
4000 17x	215-22 Yesler	Frye Hotel (1908, primary)	1	integral with basement; considerable amount of marble
5000/ 5002 24x	220 2 nd S. 202 S. Main	Masin's Furniture (1900, tertiary)	3	
5001 23x	206 2 nd S.	Northwest Hotel Supply Masin's Furniture (1905, tertiary)	3	
5003 25x	210 S Main	John Corgiat Bldg. (1900, primary)	3	restaurant; finished ceiling
6000 34x	213 S. Main	Longshore Union Hall Seattle Boatmen's Union (1900, tertiary)	2	much of building wall collapsed

SDOT # PSHD #	Address	Historic Name Common Name Date/Historic Significance	Historical Significance Rating	Notes
6001 33x	307-11 3 rd S.	Norris Safe/Mottman (1906, primary)	2	integral with basement
6002 32x	214-22 S. Jackson 313-23 3 rd S.	U. S. Rubber/Stadium Furniture/Seattle Paint Leathers (primary)	2	large part integral with basement vaults
6003 31x	320-22 2 nd S.	Fulton Hotel (1890, tertiary)	2	
6004 30x	312-16 2 nd S.	restaurant (1901, tertiary)	2	
7000 35x	222 2 nd Ave. Ext. S. 222 S. Main	Seattle Lighting (1906, primary)	4	
7001 36x	210-22 2 nd Ave. Ext. S.	Seattle Lighting Annex (1946, intrusion)	4	rehabbed as part of King St. Station area improvements
8000 22x	216-22 3 rd S.	C.T. Takahashi & Co. (1905, secondary)	3	
8001/8002 21x	208-14 3rd S.	West Coast Wholesale Drug The Lofts (1904, primary)	4	used for parking rehabbed c. 1997
8003 20x	206 3 rd S.	Norton (1904, primary)	4	
9000-9002 14x	118 Prefontaine Pl. S.	Prefontaine (1909, primary)	2	
10000- 10001 16x	300-14 S. Washington	Kaplan (1908, secondary)	2	integral part of basement
10002 15x	101-13 Prefontaine Pl. S.	Tashiro Hardware (1908, secondary)	2	same building as #10001
10003 11x	400 Yesler	Old Public Safety (1908, primary)	3	rehabbed 1975-78

SDOT # PSHD #	Address	Historic Name Common Name Date/Historic Significance	Historical Significance Rating	Notes
10011 50	501 1 st S.	Seattle Hardware (1904, primary)	4	
10012 45x	500 1 st S.	500 1 st S.	4	
10013 6	621 Post	Seattle Steam Company Post Street Plant (secondary)	2	
10014 none	5 th S. & Jackson		4	

Appendix 6
Green Line EIS Areaways Study

GREEN LINE EIS AREAWAYS STUDY

WITHIN THE DOWNTOWN SEGMENT

Prepared for:

SEATTLE MONORAIL PROJECT
Seattle, WA

Prepared by:

ENTRIX, INC.
Seattle, WA

February 28, 2004

CONTENTS

1.0	Introduction.....	407
2.0	Historical Significance.....	408
2.1	Historical Overview	408
3.0	Methodology	410
4.0	Impacts.....	412
5.0	NRHP Recommendations	416
5.0	References.....	419

TABLES

Table 3.1	List of Building Owners/Manager Contacted for Access to Properties	410
Table 6.1	NRHP Eligibility Recommendations for Each Areaway	417

FIGURES

Figure 1.1	Locations of Surveyed Areaways within the Downtown Area.....	418
------------	--	-----

1.0 Introduction

The Seattle Monorail Project (SMP) is proposing to construct a monorail that would extend 14 miles between the Ballard and West Seattle neighborhoods in Seattle, Washington (Project). The proposed Project would cross the Lake Washington Ship Canal, which is operated by the U.S. Coast Guard. Because the U.S. Coast Guard review for water crossings is a federal undertaking, federal regulations under the National Historic Preservation Act (NHPA) apply. Section 106 of the NHPA requires projects with federal involvement to consider the effect of a proposed action on historic properties listed in or eligible for the National Register of Historic Places (NRHP). In partial compliance with Section 106, SMP conducted a cultural resources inventory of archaeological resources and buildings and structures that are located within the Project Area of Potential Effect (APE), which extends 100 foot from the proposed guideway locations and 200 feet around proposed station locations. The APE was extended in specific areas beyond these locations to address adverse visual effects to key historic resources. For a detailed description of the Project APE and results of the previously conducted archaeological and historical resource study see the final *Green Line Environmental Impact Statement – Appendix NN*.

This study has been prepared to evaluate the historical significance of specific areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall (Parsons Brinckerhoff 2003). Areaways are a result of turn-of-the-century projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways, however some areaways currently in use are leased to the adjacent building property owners.

There have been numerous studies of the Pioneer Square Historic District (PSHD) areaways, which were surveyed prior to the *Green Line Draft Environmental Impact Statement* (August 2003) and determined eligible for the NRHP (Allyson Brooks, Washington SHPO Telephone Communication with Kimberly Demuth, ENTRIX, Inc., November 2003). For an assessment of impacts and mitigation measures to the Pioneer Square areaways, see the final *Green Line Environmental Impact Statement – Appendix NN*.

This report addresses the historical significance of areaways that are located outside the PSHD, but are within the Project APE of the Downtown Segment, and that may be affected by the construction of the monorail. (Figure 1.1) The conclusions of this study and an assessment of impacts and mitigation measures for historically significant areaways will be incorporated in the final *Green Line Environmental Impact Statement*.

2.0 Historical Significance

The following NRHP criteria serve as the basis for evaluating a property's eligibility for listing at the national, state, and local levels. The quality of significance in American history, architecture, archaeology, and culture is possible in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association, and:

- A) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B) that are associated with the lives of persons significant in our past; or
- C) that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components make lack individual distinction; or
- D) that has yielded, or may be likely to yield, information important in prehistory or history (36 CFR Part 60).

ENTRIX architectural historians found that the areaways identified as eligible for the NRHP that are within this study have significance under Criterion A, for their associations with the re-grading and public improvement projects of Seattle. The raising of Seattle streets, which created the areaways, is a unique urban development that reflects the initiative of early city planners to solve flooding and sanitation problems (Crowley 1998:33). ENTRIX archaeological staff did not identify archaeological resources within the areaways.

The Recommendations section (Section 4.0) of this report provides NRHP eligibility recommendations for each areaway that are based on the above criteria. Concurrence on these findings will be obtained from the Washington State Historic Preservation Officer (SHPO).

2.1 Historical Overview

The Parsons and Brinckerhoff (2003) areaways study established a set of features typical of the areaways in the PSHD. The following list, based on the Parsons and Brinckerhoff criteria, describes features normally comprising areaways in older buildings (pre-1905):

- Building walls, originally of brick, rubble and stone;
- A wall supporting the street, usually brick or rubble;
- A ceiling supporting the sidewalk, originally brick or arches supported by steel beams;
- End walls and dividing walls, originally of brick or rubble.

Buildings constructed after 1905 often had areaways finished with poured concrete walls supporting the street and flat reinforced concrete ceilings. Buildings from this later period may also lack an interior wall defining the edge of the building. In such instances, the buildings appear to have been constructed to incorporate the areaway into the building basement. Historically glass-tiled skylights in the sidewalk panels provided natural light into basement areas. Many of these skylights have been covered with concrete along the sidewalk or inside by lowered ceilings.

Additional features found in some areaways include:

- Windows or doorways connecting the areaway to the building basement or foyer.
- Decorative tiled floors
- Decorative building features
- Decorative columns in place of a building wall, where the areaway is integral with the basement
- Decks or Ceilings: In many of the older, post-fire buildings, the deck was constructed of vaulted arches made of red brick. Many of these arches have now been reinforced with concrete, replaced with concrete arches, or plastered with concrete. As the original city ordinances required that steel I-beams span from the street to the building wall, providing the foundation and support for the decks and ceilings, steel I-beams (often corroded) are often found supporting the decks and ceilings.

Similar to Pioneer Square, several areas in downtown Seattle (north of Pioneer Square) were regraded in the late nineteenth century to provide better drainage and easier pedestrian and traffic access. Multiple areas in the downtown area were regraded, including First, Second, Third, and Fifth Avenues, as well as Pike Street. One of Seattle's most influential engineers, Reginald H. Thomson, was responsible for most of the alterations. First Avenue had first been regraded in the 1870s, from James Street to Pike, expanding the length of Pike Street by several blocks (Sale 1976: 73; Spiedel 1967:226). This first re-grading involved moving fill all the way west from Eighth Avenue (Spiedel 1967:226). Thomson expanded upon the First Avenue regrade in 1897, and extended it from Pike Street to Denny Way. Between 1903 and 1910, Thomson also re-worked Second, Third, and Fifth Avenues in the downtown core to accommodate for heavy use from carriages, streetcars, and automobile traffic. Pike and Pine were soon regraded from 2nd Avenue to Broadway, for the same reasons (Sale 1976:72-78; Warren 1997:97-99). Denny Hill, one of the steepest hills in Seattle, was regraded beginning in 1902 (Sale 1976:75). This mammoth project leveled 62 city blocks, created huge amounts of landfill, and kept Thomson's crews busy for eight years (Sale 1976:76).

The regrading in the downtown areas has created areaways and a limited "underground," similar to Pioneer Square although less extensive. However, the high rate of turnover of structures in the downtown area has destroyed or altered many of the areaways underneath the sidewalks. Also, many areaways in the downtown area were constructed

later than the PSHD areaways, using poured concrete walls and flat reinforced concrete ceilings. Though less decorative, the areaways in the downtown outside of the PSHD have been used for similar purposes—as basements, storage spaces, and in some cases even business space—for the last 100 years.

3.0 Methodology

SMP historic resources consultant, ENTRIX, Inc. (ENTRIX) conducted field investigations of 35 areaways that may be effected by the construction of Project alternatives. Because the areaways within the PSHD have previously been evaluated for the NRHP, this study included only areaways outside the district. It was determined during this study that the Securities Building (1904 3rd Ave.), which SMP initially identified as having an areaway, did not have one. For the purposes of this study, the Securities Building was assigned a field site number (7) that has been included in Tables 3.1 and 6.1.

ENTRIX architectural historians and archaeologists visited each areaway to record its physical characteristics including dimensions, construction materials, condition, and to document its historical integrity. Field staff photographed and provided details of the physical characteristics and historical significance of each areaway on Washington State Historic Property Inventory Forms included in the Appendix. No archeological resources were identified within any of the areaways. A copy of the report and inventory forms will be sent to the Office of Archaeology and Historic Preservation (OAHP) for concurrence.

SMP staff, Sheryl Frisk and Miles Haupt, provided ENTRIX with a list of owners of buildings that included areaways potentially affected by the construction of the Green Line Monorail Project. Each property owner or manager was contacted directly by Sheryl Frisk and Entrix staff prior to field visits. Building owners and/or property managers accompanied ENTRIX to areaways during field recordation. Table 3.1 provides a list of individuals with whom ENTRIX coordinated to obtain access to the buildings.

Table 3.1 List of Building Owners/Manager Contacted for Access to Properties

Field Site No.	Building(s) (current building name)	Building Address	Contact	Date Surveyed
1	Times Square Building	414 Olive Way	Andrea Hinzman	10/14/03
2	Mayflower Park Hotel (Hotel Bergonian)	405 Olive Way	Susil Seneviratne	10/14/04
3a	Centennial Building	410 Stewart St.	Susil Seneviratne	10/14/03
3b	Old Annex Theatre	1912 4 th Ave.	P. B. Investments Ltd. Partnership	10/13/03
4/5/6	Bon Marche Downtown	300 Pine St.	Doug Shantry	10/16/03
7	Securities Building	1904 3 rd Ave.	No areaway	N/A

8/9/10	Bon Marche Parking Garage	1601 3 rd Ave.	Doug Shantry	10/16/03
11	Josephinum	1902 2 nd Ave.	Josephinum Assoc.	10/16/03
12	Broadacres Building	1601 2 nd Ave.	Alhadeff Prop. Ltd Partnership	10/16/03
13	Doyle Building	1527 2 nd Ave.	Howard Anderson	11/4/03
14	Forest Hotel	1521 2 nd Ave.	Adam Hassen	10/14/03
15/16	Second and Pine Building	211 Pine St.	Frederick Sheetz	10/24/03
17	Columbia Building	1516 2 nd Ave.	Ewing Clark	11/6/03
18/19	Second and Pike Parking Garage	200 Pike St.	No contact needed	10/16/03
20	Museum Plaza Building	1321 2 nd Ave.	Kidder Matthews	10/14/03
21/22/23	Galland and Seneca Buildings	1209 2 nd Ave.	Carol Thomas	10/13/03
24	Security Pacific Building	1100 2 nd Ave.	Kevin Sanders	10/13/03
25/26	Security Pacific (Mid-Rise Office)	1100 2 nd Ave.	Kevin Sanders	10/13/03
27a	SDL Office Building	1101 2 nd Ave.	Phillip Scott	10/14/03
27b	Second and Seneca Building	1109 2 nd Ave.	Phillip Scott	10/13/03
28	Federal Reserve Bank	1015 2 nd Ave.	John Carpenter	10/31/03
29/30	Exchange Building	821 2 nd Ave.	Scott Dittman	10/14/03
31	Foster and Marshall Building	720 2 nd Ave.	Diane Cook	11/6/03.
32	Dexter Horton Building	710 2 nd Ave.	Donna Byers	10/14/03
33	Fat City Motors	508 Denny Way	Carol Edwards	11/11/03
34	Eitel Building	1511 2 nd Ave.	Richard Nimmer	11/13/03

ENTRIX assessed the historical significance of each areaway by analyzing the remaining historic features, construction methods, and condition of areaways. A recent *Pioneer Square Historic District Areaways Hazard Mitigation Study, March 2003*, conducted by Parsons Brinkerhoff and the Sheridan Consulting Group, used a four-level rating system to evaluate the historical significance of areaways (Parsons Brinkerhoff and Sheridan Consulting Group 2003:12). ENTRIX staff applied the same rating system for areaways it evaluated.

- 1) All four of the key surfaces are substantially unaltered; *or*, the feature as they provide a strong sense of place, *or*, unusually significant features are present (such as tile work).
- 2) Two or three of the key surfaces are substantially unaltered and the areaway as a whole retains a sense of place;
- 3) Significant alterations have occurred to the features, but some sense of place remains;
- 4) Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains, or the areaway has been filled.

ENTRIX recommended Category 1 areaways would be eligible for the NRHP. Only some Category 2 areaways were eligible for the NRHP and all Category 3 and 4 areaways were recommended not eligible for the NRHP. (Table 4.1) For detailed information including a physical description and evaluation of historical significance for each areaway see the History Property Inventory Forms in Appendix A.

4.0 Impacts

ENTRIX analyzed potential adverse effects to NRHP-eligible areaways due to the construction and operation of the Monorail Green Line. Information regarding the placement of guideway footings was obtained from SMP engineer, Miles Haupt. To interpret short- and long-term impacts under SEPA and NEPA the following types of impacts were considered.

- **Destruction or Alteration of Property:** The demolition or extensive alteration of all or part of the resource.
- **Isolation/Alteration of Surrounding Environment:** Temporary or permanent restrictions of access to a historic resource or a change in the character of the property's setting.
- **Traffic Congestion/Parking/Access:** Congestion arising from changes in traffic patterns, parking, and access to historical resources.
- **Visual/Glare:** The introduction of modern construction or the removal of historical resources adjacent to a historic property that are out of character with or alter the resource's historical setting.

- **Introduction of New Construction:** The addition of new construction that is not compatible with the existing architecture of historical resources.
- **Structural Instability:** Introduction of vibration during construction or operation that would cause damage to historical resources.
- **Noise:** The introduction of audible elements that are out of character with the historic resource and its established use such that its use may be altered or abandoned.
- **Change of Use:** The change in use of a historic resource brought about by construction or operation-related activities that make it no longer physically or financially feasible or desirable to maintain the current use.
- **Vibration:** Construction or operation techniques that would create vibrations such that a resource may experience damages such as the loosening of paint or mortar, cracking of mortar or plaster, weakening of structural elements, or crumbling masonry.
- **Temporary Dirt/Unintended Damage:** The introduction of atmospheric elements that may alter or damage a historic resource.
- **Neglect:** neglect of a resource resulting in its deterioration or destruction. This is a potential impact assessed under no-build alternatives.

The NRHP-eligible Columbia Building and Times Square Building areaways are vacant or used for storage and are unembellished utilitarian basement areas that would not be affected by many of the common adverse effects that historic buildings experience from new construction projects. For example, these areaways would not undergo visual adverse effects, nor would they be likely to be adversely effected by isolation, traffic congestion, the introduction of new construction, noise, temporary dirt/unintended damage, change of use or neglect. None of the proposed alternatives would demolish or alter the areaways eligible for the NRHP. Below is a discussion of potential adverse effects to NRHP-eligible areaways.

Alternative 4.1 – West Side of 2nd Ave. (Preferred Alternative)

Under this alternative, the monorail would be constructed across the street from the Columbia Building areaway, which is located on the east side of 2nd Avenue between Pike and Pine streets and adjacent to the Times Square Building areaway, which extends along the south side of Stewart Street between 4th and 5th avenues. The Pike Street Station associated with this alternative would be constructed across the street from the Columbia Building areaway.

Construction Impacts

Under this alternative the Columbia Building areaway would be avoided and would not experience adverse effects due to construction vibrations. The Times Square Building areaway would be avoided, but could be adversely effected by vibration during construction.

Operation Impacts

The Columbia Building and Times Square Building areaways would not be adversely effected by the long-term operation of the monorail.

Alternative 4.2 – East Side of 2nd Avenue with Crossover

The East Alternative would require the construction of guideways along the east side of 2nd Avenue close to the Columbia Building areaway. This alternative includes a station on the east side of the street near the Columbia Building to the north. Along Stewart Street, this alternative would follow the same route as Alternative 4.1.

Construction Impacts

The Columbia Building areaway would be adversely effected by the placement of a footing in the areaway.

The adverse effects to the Times Square Building areaway would be the same as Alternative 4.1.

Operation Impacts

The Columbia Building and Times Square Building areaways would not be adversely effected by the long-term operation of the monorail.

Alternative 4.3 –Center of 2nd Avenue

Under this alternative the monorail guideway would run down the center of 2nd Avenue in front of the Columbia Building and a station would be located on the west side of the street. Along Stewart Street, this alternative would follow the same route as Alternative 4.1.

Construction Impacts

The adverse effects of the Columbia Building and Times Square Building areaways would be the same as those listed for Alternative 4.1.

Operation Impacts

The Columbia Building and Times Square Building areaways would not be adversely effected by the long-term operation of the monorail..

Alternative 4.4 – East Center of 2nd Avenue

This alternative would consist of guideways being constructed 11 feet east of the guideway locations proposed in Alternative 4.3. It would also include a station on the east side of 2nd Avenue north of the Columbia Building. Along Stewart Street, this alternative would follow the same route as Alternative 4.1.

Construction Impacts

Under this alternative the monorail guideways would avoid the Columbia Building areaway. It is possible that, that the placement of footings in close proximity of the areaway could create vibrations that would adversely effect the areaway. The effect to the Times Square Building areaways would be the same as those listed for Alternative 4.1.

Operation Impacts

The Columbia Building and Times Square Building areaways would not be adversely effected by the long-term operation of the monorail.

5.0 Mitigation Measures

Operation Impact Mitigation Measures

No mitigation measures are necessary, because the operation of the monorail will not adversely effect the Columbia Building or Times Square Building areaways.

Short Term/Construction Impacts Mitigation Measure

Construction of Alternatives 4.1 and 4.3 (West Side of 2nd Avenue and Center of 2nd Avenue) would not adversely effect the Columbia Building areaways, and therefore, no mitigation would be necessary.

Under Alternative 4.2 (East Side of 2nd Avenue with Crossover), the Columbia Building areaway could be adversely effected by the construction of a guideway footing in the areaway. SMP would avoid such an adverse effect by placing the guideway footing to the north or south of the areaway. The areaway could also be avoided by using a different footing design that would allow for placement of the footing west of the areaway.

Under Alternative 4.4 (East Center of 2nd Avenue), the Columbia Building is likely to have adverse vibration effects due to the placement of a footing near the areaway. SMP would use drilling techniques to minimize vibrations. Under all alternatives, construction vibrations could adversely effect the Times Square Building areaway. As listed in the Noise and Vibration section of the final *Green Line Environmental Impact Statement*, the following measures will be used to address vibration.

To control vibration impact from pile driving or any other major vibration source a monitoring program will be established. The monitoring program with a stop work procedure for sensitive structures is the most reliable way to minimize vibration impact during construction. The measured vibration levels are radiated through the existing soil and give real impact levels. Instead of reviewing the soil conditions and calculating impact levels (which is a very complex calculation with a large margin of error) the described procedure will accurately measure the vibration impact levels independent from the soil conditions. Should measured vibration levels exceed the thresholds established by the FTA Guidelines work would be stopped and alternative construction methods and or mitigation treatments would have to be implemented before work could continue.

A vibration monitoring program similar to the underground utility monitoring will be implemented for all activities that produce vibration levels above 0.12 inch/second or 95 VdB re 1 micro inch/second whatever is more stringent, wherever there are sensitive structures located closer than 25 feet from the construction activity.

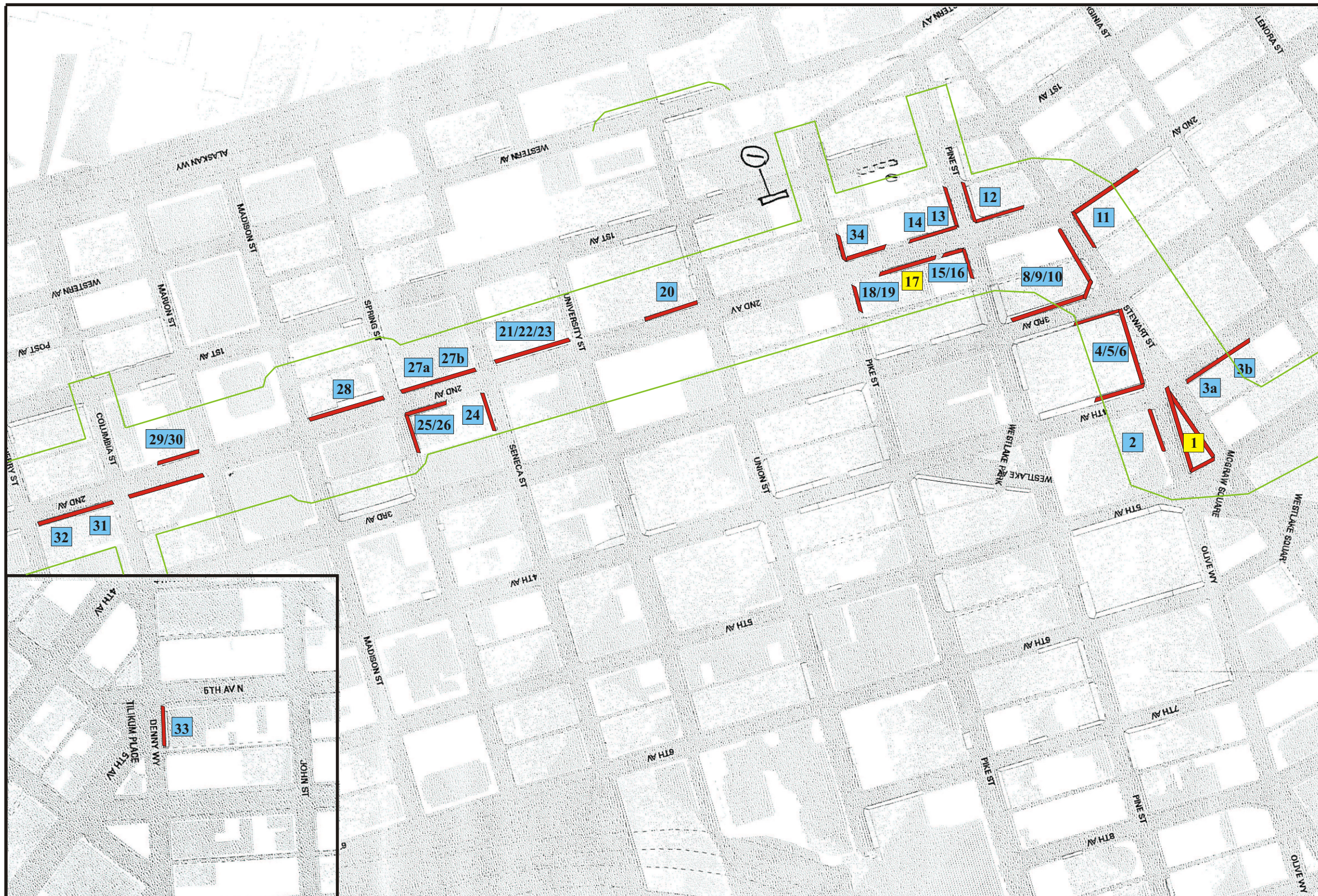
6.0 NRHP Recommendations

Table 4.1 provides a summary of ENTRIX's recommendations regarding the NRHP eligibility of each areaway included in this study. The table lists the field site number assigned to each areaway, the property name, address, rating, and if eligible for the NRHP, relevant NRHP criteria. SHPO will review the NRHP recommendations and SHPO correspondence will be included in the final *Green Line Environmental Impact Statement – Appendix NN*. Avoidance of any areaways eligible for the NRHP is recommended during construction of the Green Line Seattle Monorail Project.

Table 6.1 NRHP Eligibility Recommendations for Each Areaway

Field Site No.	Building(s) (current building name)	Building Address	Areaway s Rating	Relevant NRHP Criteria*
1	Times Square Building	414 Olive Way	2	A
2	Mayflower Park Hotel (Hotel Bergonian)	405 Olive Way	3	Not Elig.
3a	Centennial Building	410 Stewart St.	3	Not Elig.
3b	Old Annex Theatre	1912 4 th Ave.	4	Not. Elig.
4/5/6	Bon Marche Downtown	300 Pine St.	3	Not Elig.
7	Securities Building	1904 3 rd Ave.	No areaway	N/A
8/9/10	Bon Marche Parking Garage	1601 3 rd Ave.	4	Not Elig.
11	Josephinum	1902 2 nd Ave.	2	Not Elig.
12	Broadacres Building	1601 2 nd Ave.	4	Not Elig.
13	Doyle Building	1527 2 nd Ave.	2	Not Elig.
14	Forest Hotel	1521 2 nd Ave.	4	Not Elig.
15/16	Second and Pine Building	211 Pine St.	4	Not Elig.
17	Columbia Building	1516 2 nd Ave.	2	A
18/19	Second and Pike Parking Garage	200 Pike St.	4	Not Elig.
20	Museum Plaza Building	1321 2 nd Ave.	3	Not Elig.
21/22/23	Galland and Seneca Buildings	1209 2 nd Ave.	2/3	Not Elig.
24	Security Pacific Building	1100 2 nd Ave.	4	Not Elig.
25/26	Security Pacific (Mid-Rise Office)	1100 2 nd Ave.	4	Not Elig.
27a	SDL Office Building	1101 2 nd Ave.	4	Not Elig.
27b	Second and Seneca Building	1109 2 nd Ave.	4	Not Elig.
28	Federal Reserve Bank	1015 2 nd Ave.	4	Not Elig.
29/30	Exchange Building	821 2 nd Ave.	4	Not Elig.
31	Foster and Marshall Building	720 2 nd Ave.	4	Not Elig.
32	Dexter Horton Building	710 2 nd Ave.	3	Not Elig.
33	Fat City Motors	508 Denny Way	3	Not Elig.
34	Eitel Building	1511 2 nd Ave.	4	Not Elig.

* NRHP Criteria associated with areaways recommended as eligible for the NRHP



Map courtesy of the City of Seattle Structural Engineering Department

- Designates the Area of Potential Effect
- Surveyed areaway location
- 1 Designated areaway is eligible for the National Register of Historic Places
- 1 Designated areaway is not eligible for the National Register of Historic Places

Figure 1.1
Locations of Surveyed Areaways within the Downtown Segment

7.0 References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

Seattle Monorail Project

2003 *Green Line Environmental Impact Statement*. Seattle Monorail Project, Seattle, WA.

APPENDIX A
Inventory Forms

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 1 Date Recorded 10/14/2003
Site Name Historic Seattle Times Building—Areaways
Common Times Square Building
Field Recorder ENTRIX, Inc.
Owner's Name Times Square Building LLC
Address 414 Olive Way
City/State/Zip Code Seattle, WA 98101

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System _____
No. of Stories _____

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) <u>See Page 2</u>				

LOCATION SECTION

Address 414 Olive Way
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section NE Section _____
Tax No./Parcel No. 0659000385 Acreage 0.24 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549716 Northing 5273432
Plat/Block/Lot Bell Heirs of Sarah A Add/8/1-2-3
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable
☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development
- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military
- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (specify) _____
- ☐ Study Unit Sub-Theme (specify) _____

Statement of Significance

Date of Construction 1916 Architect/Engineer/Builder Carl Gould and Charles Bebb, architects

- X In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinkerhoff and Sheridan Consulting Group 2003).

Areaways are located in the basement of the Times Square Building, which is listed in the National Register of Historic Places and Washington Heritage Register and as a Seattle Landmark. Areaways are located in the basement of this building along 5th Avenue and Olive Way.

Rating 2: Two or three of the key surfaces are substantially unaltered and the areaway as a whole retains a sense of place. The areaway on the Olive Way side of the building is two-stories, including a basement and sub-basement. The sub basement once served as a newspaper printing room for the Seattle Times newspaper. Hand prints on the walls from the workers operating the printing machines are still present on the walls. The areaway along Stewart Street appears eligible for the National Register of Historic Places under Criteria A and C, for its association with the City of Seattle’s development of areaways during road development projects and for its association with the Seattle Times Company. The raising of Seattle streets, which created the areaways, is a unique urban development that reflects the initiative of early city planners to solve flooding and sanitation problems. The Seattle Times was founded in 1896 and is a locally owned, private and independent news and information company. The areaways along 5th Avenue and Olive Way do not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

Three areaways surround the base of this building along Stewart Street (north), 5th Avenue (east), and along Olive Way (south). The areaway along Olive Way follows the eastward slope of the hill, which exposes a portion of the areaway to street level. The areaway along 5th Avenue is one-story directly below the sidewalk and the areaway along Stewart Street consists of two stories below the sidewalk. The lower level of the Stewart Street areaway was used as a newspaper printing room and includes handprints on the walls from the workers operating the printing presses. The areaway directly below the street has been modified and does not retain original integrity. However, the basement and sub-basement levels retain original concrete walls and supports dating to earliest use of the building as newspaper production facilities. Portions of the areaways are used as office space, retail space, or are currently unused.

Due to the size and configuration of the Times Square Building, there are numerous areaways described below.

- 1) Facing East (5th Avenue): Retail store has renovated entire area leaving small crawl space behind dry wall. Concrete wall, floor and ceiling facing 5th avenue.
- 2) Facing Olive Way: Three-inch slab concrete over steel beams. Original concrete flooring is intact.
- 3) Facing Olive Way: Concrete walls, ceiling and floor intact.
- 4) Fourth/Olive: At point of building (west end). Concrete floors and ceiling intact.
- 5) Basement Level Facing Stewart Street: Concrete walls, ceiling, floor. Concrete walls divide space.
- 6) Basement Level Facing 5th Avenue: Concrete walls with wallboard over; contains water main altered.
- 7) Basement Level Facing Olive Street: Concrete walls altered with stucco surfacing.
- 8) Sub Basement Level Facing Stewart: newel post remains intact, stucco over concrete walls; original printing press area.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group
2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 2 Date Recorded 10/15/2003
Site Name Historic Hotel Bergonian
Common Mayflower Park Hotel
Field Recorder ENTRIX, Inc.
Owner's Name Mayflower Park Hotel
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Facing east toward Olive Way
Date 10/15/03

Classification: ☐ District ☐ Site ☒ Building(s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System ☐ Gambrel ☐ See Page 2
No. of Stories _____
Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Shed

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) <u>See Page 2</u>				

LOCATION SECTION

Address 405 Olive Way
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section NE Section _____
Tax No./Parcel No. 0659000030 Acreage 0.19 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549721 Northing 5273385
Plat/Block/Lot Bell Heirs of Sarah A Add/1/5-6
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable
☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes *(check one or more of the following)*

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other *(specify)* _____
- ☐ Study Unit Sub-Theme *(specify)* _____

Statement of Significance

Date of Construction 1927 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 2 is located in the basement of the Mayflower Hotel, historically known as the Borgonian. Located on the southwest corner of 4th Avenue and Olive Way, this building has been determined eligible for the National Register of Historic Places. The areaway is used as a hotel service area.

Rating 3: Significant alterations have occurred to the areaway features, but some sense of place remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaways do not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

The areaway facing Olive Way retains the original concrete walls and flooring, both of which have been painted. A Seattle City Light utility area has been built in an enclosed space of the areaway (approximately 6’ square) which divides the space below ground. An original access hatch to the street that once functioned as a passthrough to the street for supplies and cargo has been filled with concrete. Overall the space retains few original features and has been largely renovated. The areaway measures approximately 118’ L x 6’ W with several alterations to the original alignment of the space by concrete walls and utilities.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 3A Date Recorded 10/15/2003
Site Name Historic Centennial Bldng - Areaways
Common Centennial Building
Field Recorder ENTRIX, Inc.
Owner's Name Westlake Park Associates
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Facing West toward 4th Avenue
Date 10/15/03

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System _____
No. of Stories _____

Roof Type

☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 410 Stewart Street
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section NE Section _____
Tax No./Parcel No. 06590004000 Acreage _____
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549705 Northing 5273427
Plat/Block/Lot Bell Heirs of Sarah A Add/9/1-2
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other _____ |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes *(check one or more of the following)*

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1925 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 3a is located in the basement of the Centennial Building, which is located at the northwest corner of 4th Avenue and Stewart Street.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaway does not appear eligible for the National Register of Historic Places..

Description of Physical Appearance

The areaway retains original concrete wall and square columns facing 4th Avenue. No other original features remain. Areaway measures 100’ L x 17’ W. The areaway displays few of the original elements with the exception of the concrete walls and possibly the flooring. Utilities service and modifications have impaired integrity of remaining features.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 3B Date Recorded 10/16/2003
Site Name Historic Annex Theatre - Areaways
Common AVCO Financial Services
Field Recorder ENTRIX, Inc.
Owner's Name PB Investments Ltd. Ptn
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Toward 4th Avenue, facing west
Date 10/16/03

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete floors/walls

Plan _____

Structural System Steel beam

No. of Stories _____

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*)
☐ Gambrel See Page 2
☐ Shed

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*)
☐ Other (*specify*) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*)
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☒ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 1912 4th Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98121
Twp 31 Range 25 Section 4 Section NE Section _____
Tax No./Parcel No. 0659000410 Acreage 0.15 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549707 Northing 5273434
Plat/Block/Lot Bell Heirs of Sarah A Add/9/3
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable
☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes *(check one or more of the following)*

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other *(specify)* _____
- ☐ Study Unit Sub-Theme *(specify)* _____

Statement of Significance

Date of Construction 1924 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaways are located in the basement of the AVCO Financial Services Building, historically known as the Annex Theater. Areaways are located in the basement of this building along Fourth Avenue.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaways do not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

The space has been remodeled into a modern office space, which is currently vacant. The only remaining element that may be original is the concrete ceiling. Walls have been covered with wallboard or plywood and painted. Floor is carpeted. Support columns may be original to areaway; the columns stand 16’ from outer wall. The entire space measure 57’ long (north to south).

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 4/5/6 Date Recorded 10/16/2003
Site Name Historic Areaways Associated with Building
Common Bon Marche Department Store
Field Recorder ENTRIX, Inc.
Owner's Name Federated Department Stores Incorporated
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. Digital
View of Section 1 (see below) facing east
Date 10/16/03

Classification: ☐ District ☐ Site ☒ Building(s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System _____
No. of Stories _____

Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) <u>See Page 2</u>				

LOCATION SECTION

Address 300 Pine Street
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section NE Section _____
Tax No./Parcel No. 1977201320 Acreage 1.86 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549714 Northing 5273290
Plat/Block/Lot Dennys AA 6th Add/Block 52
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1929 Architect/Engineer/Builder John Graham, Sr.

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaways 4, 5, and 6 are located in the basement of the Bon Marche Building which is at southeast corner of 3rd Avenue and Stewart Street. This building is a Seattle Landmark and has been determined eligible for the National Register of Historic Places (Seattle Monorail Project 2003).

Rating 3: Significant alterations have occurred to the areaway features, but some sense of place remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaways do not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

The areaways under the Bon Marche building on Stewart Street, 3rd Avenue and 4th Avenue have been significantly modified for use as retail space, storage, and air ducts. Original concrete walls remain but no other historical features are visible. The entire sub-basement retains original character and may be part of the original areaway. Access to this space along Stewart and 4th avenues was restricted. The sub-basement occupies an area underneath 3rd Avenue, which would have been below the original areaway. Concrete and brick building supports and foundation are still intact at this level and show heavy damage from the 2001 earthquake.

The areaway underneath the Bon Marche building was divided into 3 sections.

Section 1: Areaway 4 extends along 3rd Avenue and retains original clay tile block on interior walls. The space has been modified by utility installation and only a narrow crawlspace remains. No other original features are visible.

Section 2: Areaway 5 extends along Stewart Street and is occupied by, what is now, a ventilation shaft that cycle HVAC through the building. The crawlspace measure approximately 4’8” x 4’8”. Outer wall facing Stewart Street is probably original concrete structure.

Section 3: Areaway 6 stretching along 4th Street was not directly accessible, but the visible portions showed same construction as other two sections. Concrete walls facing outward and interior clay tile block walls separate areaway from inner corridors.

Major Bibliographic References

Seattle Monorail Project

Greenline Environmental Impact Statement. Seattle: Seattle Monorail Project, 2003.

Parsons Brinckerhoff and Sheridan Consulting Group

2003 *Pioneer Square Historic District Areaways Hazard Mitigation Study.* Prepared for the City of Seattle Department of Transportation Department, Seattle, WA

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 8/9/10 Date Recorded 10/14/2003
Site Name Historic Areaways associated with Garage
Common Bon Marche Garage
Field Recorder ENTRIX, Inc.
Owner's Name Bon Incorporated
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete

Plan _____

Structural System _____

No. of Stories _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of N wall along Stewart St., facing north
Date 10/14/03

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel See Page 2
☐ Shed _____

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 1601 3rd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section NE Section _____
Tax No./Parcel No. 1977200980 Acreage 0.72 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549710 Northing 52732252
Plat/Block/Lot Dennys AA 6th Add/45/2-3
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development
- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military
- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (specify) _____
- ☐ Study Unit Sub-Theme (specify) _____

Statement of Significance

Date of Construction 1959 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaways 8, 9, and 10 are located in the basement of the Bon Marche Garage, which is located at the northwest corner of 3rd Avenue and Pine Street. This modern structure uses the areaway space for parking.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaways do not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

No features of the original areaways 8, 9, and 10 remain with the exception of concrete outer walls. No original features were visible. The concrete walls facing 3rd Avenue may be original but have likely undergone significant modification. The width of the areaway measuring from the exterior wall to the columns that run along the interior of the areaway is 18’3”.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group
2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 11 Date Recorded 10/17/2003
Site Name Historic New Washington Hotel - Areaways
Common Josephinum
Field Recorder ENTRIX, Inc.
Owner's Name Josephinum Associates
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of facing south toward Stewart St.
Date 10/17/03

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System ☐ Gambrel ☐ See Page 2
No. of Stories _____
Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Shed

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) <u>See Page 2</u>				

LOCATION SECTION

Address 1902 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section NE Section _____
Tax No./Parcel No. 1977201060 Acreage 0.36 acres
Quadrangle or Map Name Seattle North
UTM References Zone 10 Easting 548607 Northing 5276029
Plat/Block/Lot Dennys AA 6th Add/46/8-9 & 12
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1907 Architect/Engineer/Builder Eames & Young

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 11 is located in the basement of the Josephinum Hotel, historically known as the New Washington Hotel. The building is located at the northeast corner of Second Avenue and Stewart Street. This building is listed on the National Register of Historic Places and as a Seattle Landmark. The areaway along Stewart St. retains some original architectural features and design elements, but has been significantly altered. The areaway along 2nd Avenue does not retain any integrity.

Rating 2: Two or three of the key surfaces are substantially unaltered and the areaway as a whole retains a sense of place. The physical alterations to these areaway have compromised their historical integrity making them ineligible for the National Register of Historic Places.

Description of Physical Appearance

Areaway 11, which extends along 2nd Avenue has been remodeled and closed off. An access door/closet offers some visibility of the original concrete wall and floor structure. Overall, the space has been renovated and no original features are visible.

Stewart Street: The Stewart Street areaway has been divided into two spaces. The first space is within the Women’s Wellness Center and serves as a storage area. Walls are concrete, as are floors and ceiling. The concrete walls have an extruded brick facing applied approximately 6” from the outer wall of the areway, leaving a small space between. Steel support beams in ceiling. No original elements were visible. The second space lies east of the first on Stewart Street and presently serves as storage for the Josephinum. The space is comprised of concrete outer walls and metal clad ceiling. Inner support walls near street appear to be original brick support walls which have been painted white; these walls extend ~12’ from the street into the space. Flooring in the areaway is mostly concrete, but some areas have original red brick tile work. Walls bear evidence of what appears to be decorative velvet wallpaper. No brick arches or support columns are apparent.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 12 Date Recorded 10/14/2003
Site Name Historic Broadacres Building—Areaways
Common Nordstrom Rack
Field Recorder ENTRIX, Inc.
Owner's Name Alhadeff Property Ltd. Partnership
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. _____
View of Areaway along Pine St., facing west
Date 10/14/03

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System _____
No. of Stories _____

Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel See Page 2
☐ Shed

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 1601 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 1977200040 Acreage 0.28 acres
Quadrangle or Map Name Seattle South
UTM References Zone _____ Easting 549611 Northing 5273198
Plat/Block/Lot Dennys AA 6th Add/27/10-11
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1908 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 12 is located in the basement of the Broadacres Building. The areaway is currently used as a retail space.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. The historical integrity of this areaway has been compromised by modern additions. No features of the original structure remain with the exception of concrete outer walls. The areaway does not appear eligible for the National Register of Historic Places

Description of Physical Appearance

The entire areaway (#12) has been modified and renovated as retail space. Original concrete walls facing Pine and 2nd avenues remain intact. A partition wall has been built which leaves a storage space between indoor retail space and outer wall. Concrete floors. No other features are visible in storage space. Utilities have encroached into original areaway space as well.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 *Pioneer Square Historic District Areaways Hazard Mitigation Study*. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 13 Date Recorded 11/06/2003
Site Name Historic A.E. Doyle Building - Areaways
Common Doyle Building
Field Recorder ENTRIX, Inc.
Owner's Name AE Doyle Building LLC
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Facing east toward 2nd Avenue
Date 11/06/03

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete ☐ Flat ☐ Hip
Plan _____ ☐ Monitor ☐ Other (*specify*) _____
Structural System Wood beams/rebar ☐ Gambrel ☐ Shed
No. of Stories _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 1527 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 1975700605 Acreage 0.21 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549662 Northing 5273116
Plat/Block/Lot Dennys AA 3rd Add/26/2-3
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1919 Architect/Engineer/Builder Doyle & Merriam

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaways 13 is located in the basement of the A. E. Doyle Building, which is listed in the National Register of Historic Places. The building basement, including the areaways, is used as a parking garage for the office space above. Areaways extend along the Second Avenue and Pine Street sides of the building.

Rating 2: Two or three of the key surfaces are substantially unaltered and the areaway as a whole retains a sense of place. The areaways in the A. E. Doyle building appear to have undergone few alterations over time, however, they date to the later period of areaway development and lack distinctive characteristics. The skylight sidewalk panels were covered with concrete in the 1990s. These areaways do not appear eligible for the National Register of Historic Places due to lack of architectural distinction. Better examples of Seattle areaways are extant throughout the downtown area.

Description of Physical Appearance

This areaway is in the basement of the A. E. Doyle Building, which is located at the corner of Second Avenue and Pine Street. The basement of the building is currently used as garage and has a concrete floor and walls. The basement also includes concrete octagonal columns that are structural architectural features extending throughout each floor of the building. Five columns extending along both the north and east sides of the basement delineate the edge of the building. The width of the areaway from the columns to the wall is 15’2”. The north areaway measures 121 feet long (north to south) and the east areaway measures approximately 84’ (east to west). Constructed in 1919, this areaway has concrete walls and a flat-concrete ceiling unlike the older areaways that often feature stone or rubble walls and arched ceilings.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group
2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 14 Date Recorded 10/15/2003
Site Name Historic Areaways associated with building
Common Forest Hotel – Plasma Center
Field Recorder ENTRIX, Inc.
Owner's Name Samis Foundation
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete ☐ Flat ☐ Hip
Plan _____ ☐ Monitor ☐ Other (specify) _____
Structural System Wood beams/rebar ☐ Gambrel ☐ See Page 2
No. of Stories _____ ☐ Shed

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Towards 2nd Ave. facing NE
Date 10/15/03

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Gambrel ☐ See Page 2
☐ Shed

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) _____	<u>See Page 2</u>			

LOCATION SECTION

Address 1521 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 1975700610 Acreage 0.17 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549666 Northing 5273109
Plat/Block/Lot Dennys AA 3rd Add/25/3-6
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1909 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaway (Parsons Brinkerhoff and Sheridan Consulting Group 2003)

Areaway 14 is located in the basement of the Forest Hotel Building, which has been determined ineligible for the National Register of Historic Places due to alterations that have compromised its historical integrity. The areaway extends along the edge of 2nd Avenue.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. The historical integrity of the areaway has been compromised by the physical alterations described below. This areaway does not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

Concrete walls facing 2nd Avenue with rebar on ceiling, concrete floor. Wood slats in ceiling, wood partition wall between sections.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group
2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 15/16 Date Recorded 10/24/2003
Site Name Historic Haight Building
Common 2nd and Pine Building
Field Recorder ENTRIX, Inc.
Owner's Name Frederick B. Scheetz
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible

☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building(s) ☒ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☒ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete ☐ Flat ☐ Hip
Plan _____ ☐ Monitor ☐ Other (specify) _____
Structural System Wood beams/rebar ☐ Gambrel
No. of Stories _____ ☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Concrete Archway over door in Room 7,
East-West Areaway, facing southwest
Date 10/24/03

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Gambrel
☐ Shed _____

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) <u>See Page 2</u>				

LOCATION SECTION

Address 211 Pine Street
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 1975700420 Acreage 0.13 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549638 Northing 5273198
Plat/Block/Lot Dennys A A 3rd Add/23/1
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable

☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☐ Community Planning/Development
- ☐ Study Unit Sub-Theme (*specify*) _____
- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military
- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____

Statement of Significance

- Date of Construction 1910 Architect/Engineer/Builder S. Jennings, Architect
- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaways 15 and 16 are located in the basement of the Second and Pine Building, historically known as the Haight Building. Seattle attorney James Haight commissioned Architect S. Jennings to design the Haight Building in 1908 for use as offices. After Haight’s death in 1946, the building was sold to the Second and Pine Corporation for 200,000. It was remodeled in 1991 by Johnson Architects & Planning (Crowley 1998). Areaways are located in the basement of this building along the Pine Street and Second Avenue sides of the building.

Rating 3: Significant alterations have occurred to the areaway features, but some sense of place remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaways do not appear eligible for the National Register of Historic Places..

Description of Physical Appearance

The basement of this residential building appears to have once included a large open space with 11 varying sized rooms located in the building’s areaway space to the north (along Pine Street) and west (along Second Avenue). Each room on the north and west sides of the building have concrete-filled panels on the ceiling where the historic glass sidewalk panels were once located. The south side of the building also includes one very small room that does not have sidewalks above it.

The 11 areaway rooms have concrete walls, some of which are covered with plaster and painted. Square concrete columns once separated the entrances to the rooms. Simple squared-off concrete arches also framed the entrances to the rooms. The building is currently owned by Breier-Scheetz, which renovated the building in 1992. During the renovation, the glass sidewalk/skylight panels were replaced and the 11 rooms that were once open to the basement were enclosed with drywall and metal doors. Some of the original walls between the rooms on the north side of the building have a large rectangular hole that appears to have been cut for a heating duct that has since been removed. The measurements of each room are listed below. Rooms located along Second Avenue areaway (all measurements listed north-

- south/east-west)
1. 12.7 x 11

2. 12.2 x 11

3. 13 x 22.8

4. 12.2 x 10.9

5. 12.2 x 10.9

6. 12.2 x 10.9
- Rooms located along Pine Street areaway
7. 12.2 x 12.2

8. 12.2 x16.8 and 16.8 x 15.9

9. 11.4 x 15

10. 11.4 x 15

11. 13 x 15

Major Bibliographic References

Crowley, Walt
National Trust Guide, Seattle: America’s Guide for Architecture and History Travelers. New York: John Wiley & Sons, Inc., 1998.

Parsons Brinckerhoff and Sheridan Consulting Group

2003 *Pioneer Square Historic District Areaways Hazard Mitigation Study*. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 17 Date Recorded 11/6/2003
Site Name Historic Columbia Building - Areaways
Common Columbia Building
Field Recorder ENTRIX, Inc.
Owner's Name Columbia Building
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible

☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete floors/walls
Plan _____
Structural System Steel beam
No. of Stories _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) _____

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Second Ave. areaway, facing south to end of
areaway
Date 11/6/03

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel See Page 2
☐ Shed

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☒ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 1516 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 1975700440 Acreage 0.3 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549691 Northing 5273135
Plat/Block/Lot Dennys AA 3rd Add/23/5 & 8
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable

☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1906 Architect/Engineer/Builder _____

- ☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 17 is located in the basement of the Columbia Building, which is on the east side of 2nd Avenue between Pike and Pine streets.

Rating 2: Two or three of the key surfaces are substantially unaltered and the areaway as a whole retains a sense of place. As described below, Areaway 17 is a well intact example of a Seattle areaway. It has retained its original elements including arched ceiling panels between metal I-beams and original wall surfaces. During the historic period, a storage room was placed in the southern portion of the areaway. The old walls of the room are deteriorated revealing the areaway walls in places. This areaway appears eligible for the National Register of Historic Places under Criterion A for its association with the re-grading and public improvement projects of Seattle. The raising of Seattle streets, which created the areaways, is a unique urban development that reflects the initiative of early city planners to solve flooding and sanitation problems.

Description of Physical Appearance

Areaway 17 is in the unfinished basement of the Columbia Building. The areaway is adjacent to the basement of the building and extends along the Second Ave. (west) side of the building. The areaway measures 15’ 8” wide (stretching west beyond the footprint of the building) and is approximately 50’ long (north to south). The ceiling of the areaway includes concrete arches separated by rusted metal I-beams. The height of the areaway measures 8’6” to the bottom of the “I” beams. The north and west wall of the areaway consists of rubble and concrete. The south wall is constructed of varying sizes of rough stone. The southern 14’3” of the areaway was used as a storage room. During the historic period, this small room was framed with wood and had walls finished with metal mesh covered by concrete. The walls are damaged or missing in some places, exposing the original walls of the areaway. The M.A. Gottstein Furniture Company historically occupied this building. The small room included a wooden storage closet and storage bin with many small bins for storing furniture hardware. A larger wooden storage container was also located on the west wall just north of the room. This bin included some paper tags with the Company name and description of contents for the smaller bins. A concrete column with exposed red brick at the top is located where the edge of the building joins the north end of the areaway. The floor of the areaway consists of large concrete tiles. The seven wooden posts that support the ceiling of the areaway do not appear original.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 18/19 Date Recorded 10/16/2003
Site Name Historic Areaways associated with building
Common 2nd and Pike Street Garage
Field Recorder ENTRIX, Inc.
Owner's Name Fifteen O One Fourth Avenue Lt.
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Facing west toward 2nd Ave.
Date 10/16/03

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete

Plan _____

Structural System _____

No. of Stories _____

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) _____

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 200 Pike Street
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 1975700460 Acreage 0.29 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549685 Northing 5273123
Plat/Block/Lot Dennys A A 3rd Add/23/9&12
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable
☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1963 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinkerhoff and Sheridan Consulting Group 2003).

Areaways 18 and 19 are located in the basement of the Second and Pike Garage, which was constructed in 1963.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. No features of the original structure remain with the exception of concrete outer walls. The historical integrity of the areaway has been compromised by the physical alterations described below. The areaway does not appear eligible for the National Register of Historic Places..

Description of Physical Appearance

Areaways 18 and 19 have been remodeled as a parking garage. Only concrete walls remain, floors have been covered with asphalt, ceiling is corrugated metal. Steel beams have been installed to support columns. Space measures approximately 90’ L x 15’ W. Square support columns are concrete. No other features remain.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group
2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 20 Date Recorded 10/15/2003
Site Name Historic Areaways Associated with Building
Common Arcade Plaza (Art Annex)
Field Recorder ENTRIX, Inc.
Owner's Name Seattle Art Museum
Address _____
City/State/Zip Code _____

Status
☒ Survey/Inventory **PHOTOGRAPHY**
☐ National Register Photography Neg. No. Digital
☐ State Register Roll No. & Frame No. Digital
☐ Determined Eligible View of Facing east
☐ Determined Not Eligible Date 10/15/03
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building (s) ☒ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types Roof Type
Building Type concrete ☐ Gable ☐ Hip
Plan _____ ☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
Structural System _____ ☐ Gambrel See Page 2
No. of Stories _____ ☐ Shed

Cladding (exterior wall surfaces)
☐ Log ☐ Wood Shingle
☐ Horizontal Wood siding ☐ Wood shake
☐ Rustic/Drop ☐ Composition
☐ Clapboard ☐ Slate
☐ Wood Shingle ☐ Tar/Built-Up
☐ Board and Batten ☐ Tile
Styles/Forms (check one or more of the following)
☐ Vertical Board ☐ Metal (specify) _____
☐ Asbestos/Asphalt ☐ Other (specify) See Page 2
☐ Brick ☐ Not Visible
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Integrity (Include detailed description in Description of Physical Appearance)
Intact Slight Moderate Extensive
Change to plan..... ☐ ☐ ☐ ☐
Changes to windows..... ☐ ☐ ☐ ☐
Changes to original cladding..... ☐ ☐ ☐ ☐
Changes to interior..... ☐ ☐ ☐ ☐
Other (specify) See Page 2

LOCATION SECTION

Address 1321 Second Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 1974700005 Acreage 1.24 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549804 Northing 5272891
Plat/Block/Lot Dennys AA 2nd Add/1/POR
Supplemental Map(s) None



High

☐ Greek Revival ☐ Spanish Colonial
☐ Gothic Revival ☐ Tudor Revival
☐ Italianate ☐ Craftsman/Arts & Crafts
☐ Second Empire ☐ Bungalow
☐ Romanesque Revival ☐ Prairie Style
☐ Stick Style ☐ Art Deco/Art Moderne
☐ Queen Anne ☐ Rustic Style
☐ Shingle Style ☐ International Style
☐ Colonial Revival ☐ Northwest Style
☐ Beau Arts/Neoclassical ☐ Commercial Vernacular
☐ Chicago/Commercial Style ☐ Residential Vernacular (see below)
☐ American Foursquare ☐ Other (specify) _____
☐ Mission Revival See Page 2

Vernacular House Types
☐ Cross gable
☐ Gable front
☐ Gable front and wing
☐ Side gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1908 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

The basement of the Museum Plaza building located at the southwest corner of Second Avenue and Union Streets, includes an areaway along Second Avenue.

Rating 3: Significant alterations have occurred to the areaway features, but some sense of place remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaway does not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

Areaway 20 has been renovated for use as office space, but is currently vacant. The original elements have been enclosed by drywall with the exception of a small narrow space that runs the entire length of the building along 2nd avenue that retains the original brick wall structure. Flooring in the space is concrete and ceiling is mostly corrugated metal that serves to protect space from water runoff underneath sidewalk and water fountain above. No other original features were observed. The areaway has been divided into two spaces during renovation of the office space within.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 21/22/23 Date Recorded 10/13/2003
Site Name Historic Areaways Associated with Building
Common Galland and Seneca Buildings
Field Recorder ENTRIX, Inc.
Owner's Name Samis Land Company
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. Digital
View of Brick archway in Section 2, facing Southwest
Date 10/13/03

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete floors/walls

Plan _____

Structural System Steel beam

No. of Stories _____

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☒ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 1209 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 1974700175 Acreage 0.6 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549867 Northing 5272794
Plat/Block/Lot Dennys AA 2nd Add/6/2-3 & 6-7
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable
☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1906 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaways 21, 22, and 23 are located in the basement of the Galland and Seneca Building, which has been determined ineligible for the National Register of Historic Places. The areaways are currently used for storage and parking. As described below, the areaways are divided into four sections. Section 1 and 2 retain some original architectural features including brick columns and arches. Section 3 and 4 retain very little integrity.

Sections 1 and 2 – *Rating 2: Two or three of the key surfaces are substantially unaltered and the areaway as a whole retains a sense of place.*
Sections 3 and 4 – *Rating 3: Significant alterations have occurred to the features, but some sense of place remains.*

Although Sections 1 and 2 have retained elements of the original areaway, because areaway along 2nd Avenue has modern intrusions, the areaway does not appear eligible for the National Register of Historic Places. Better examples of intact areaways are extant in Seattle.

Description of Physical Appearance

The areaway space is divided into the following four sections.

Section 1 is an enclosed space at the southern end of the Seneca Building. This section comprises concrete floors and a concrete wall facing 2nd Avenue. Steel beams in the ceiling have been added after original construction. Wooden beams have also been added for additional bracing.

Section 2 is an additional enclosed space directly north of Section 1, below the Seneca Building. One original brick arch remains intact in this room. Interior walls have been added as Room dividers. This room opens onto a garage space to the North. The arch appears to be original, constructed of brick and mortar and is intact. A brick side wall separates this space From the garage space. Floors are concrete. Area measures 39’ L x 13’ W.

Section 3 is the garage space north of the enclosed storage area below the Seneca Building. Concrete wall facing 2nd Avenue. Concrete columns supported by wood beams and brick arch supports. One large arch support is intact with small steel reinforced arches. Northern wall of area is brick. Ceiling contains glass exposed with some wood support added. Original flooring intact and extends through garage. The area measures 59’ L x 12.5’ W.

Section 4 comprises the area underneath the Galland Building. The area is a parking garage currently. The wall facing 2nd Avenue appears to be concrete and fill stone construction. Floors and walls are concrete. Several columns show exposed brick with stucco overlay. Wood supports are visible in ceiling and walls. Linoleum flooring is exposed in several areas of the garage outside of the areaway. Areaway measures 126’ L x 12’ W.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 *Pioneer Square Historic District Areaways Hazard Mitigation Study*. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 24.25.26 Date Recorded 10/14/2003
Site Name Historic Baillargeon Building
Common Security Pacific
Field Recorder ENTRIX, Inc.
Owner's Name King County
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of _____
Date 10/15/03

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System _____
No. of Stories _____

Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 1100 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 0942000070 Acreage 0.32 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549938 Northing 5272741
Plat/Block/Lot Borens C D Add/14/5&8
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable
- ☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1906 Architect/Engineer/Builder Saunders & Lawton

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaways are located in the basement of the Security Pacific Building, which is located on the east side of Second Avenue between Seneca and Spring streets.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaway does not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

The areaway under Spring Street has been completely renovated and is used as a storage area. The only remaining original structure is the concrete outer wall. The areaway under 2nd Avenue at Spring Street has been completely renovated into a hallway. No original structure remains. The outer wall has been refinished with drywall. The areaway under Seneca Street currently serves as unused storage space. The space retains little original integrity and is in good condition.

Spring Street and 2nd Avenue: Concrete flooring, concrete beams and some exposed brick on Spring Street wall. 2nd avenue portion has been converted to hallway, finished walls, ceiling and floor. No arches present. 58' L x 9' W

Seneca Street Areaway: Tile flooring may be result of bathroom installation in past; fixtures have been removed. Space is divided by concrete wall into two sections. Lowered ceiling in some areas. Areaway measure approximately 56' L x 11' W. Areaway has been significantly modified from original condition.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group
2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 27 Date Recorded 10/15/2003
Site Name Historic
Common HOB-SDL Office Building/2nd & Senecal Bldg.
Field Recorder ENTRIX, Inc.
Owner's Name Washington Mutual Bank/EOP NW properties LL
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Facing east
Date 10/15/03

Classification: ☐ District ☐ Site ☒ Building(s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System ☐ Gambrel
No. of Stories _____
Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
See Page 2
☐ Shed

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) <u>See Page 2</u>				

LOCATION SECTION

Address 1101 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 0942000025 Acreage 0.49 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549916 Northing 5272712
Plat/Block/Lot Borens C D Add/13/5-7-8
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1968 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 27 is located in the basement of the 1101 2nd Avenue Building. When this building was constructed in 1968, the original areaway construction features were covered with modern construction materials.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaways do not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

The areaway is currently used for storage space. The wall facing 2nd Avenue is concrete, but has been painted and may have been refurbished. No other original features are intact in this space. The ceiling is not original and the floors have been refinished as well.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 *Pioneer Square Historic District Areaways Hazard Mitigation Study*. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 28 Date Recorded 10/31/03
Site Name Historic Federal Reserve Bank of San Francisco Areaways
Common Federal Reserve Bank of San Francisco Areaways
Field Recorder ENTRIX, Inc.
Owner's Name Federal Reserve Bank Seattle Branch
Address 1015 2nd Ave.
City/State/Zip Code Seattle, WA

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Local Designation

PHOTOGRAPHY

Photography Neg. No. Not allowed
Roll No. & Frame No. NA
View of NA
Date NA

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types
Building Type _____
Plan _____
Structural System _____
No. of Stories _____

Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)
☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☒ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☒ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Roof Material
☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation
☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) <u>See Page 2</u>				

LOCATION SECTION

Address 1015 2nd Ave.
City/Town/County/Zip Code Seattle, WA
Twp 4 Range 25 Section SE 31 Section _____ Section _____
Tax No./Parcel No. 0939000520 Acreage 0.6
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549962 Northing 5272635
Plat/Block/Lot Boren and Dennys Addition/12/2-3 & 6-7
Supplemental Map(s) _____

High Styles/Forms (check one or more of the following)

☐ Greek Revival	☐ Spanish Colonial
☐ Gothic Revival	☐ Tudor Revival
☐ Italianate	☐ Craftsman/Arts & Crafts
☐ Second Empire	☐ Bungalow
☐ Romanesque Revival	☐ Prairie Style
☐ Stick Style	☐ Art Deco/Art Moderne
☐ Queen Anne	☐ Rustic Style
☐ Shingle Style	☐ International Style
☐ Colonial Revival	☐ Northwest Style
☐ Beau Arts/Neoclassical	☐ Commercial Vernacular
☐ Chicago/Commercial Style	☐ Residential Vernacular (see below)
☐ American Foursquare	☐ Other (specify) _____
☐ Mission Revival	<u>See Page 2</u>

Vernacular House Types

☐ Gable front	☐ Cross gable
☐ Gable front and wing	☐ Pyramidal/Hopped
☐ Side gable	☐ Other
	<u>See Page 2</u>

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1949-1950 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

The Federal Reserve Bank of San Francisco was constructed in January 1949 and replaced the Rialto Building, the original building on the site. The areaways are now located in the basement of the Federal Reserve Bank, along the Second Avenue side of the building. A portion of the basement, including the areaways, is used as a pistol range.

Rating 4: *Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains.* The historical integrity of the areaways has been compromised by the physical alterations described below. The areaways do not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

In preparation for construction of the Federal Reserve Bank, all portions of the Rialto Building were removed except for a rubble wall near the northwest side of the building. In construction of the Federal Reserve Bank, a vault was built first at the lowest level of the building, and the walls were then sheetrocked around the vault, around the rubble wall. The rubble wall is now the only visible remainder of the original areaway.

There have been numerous modifications to the basement and ground floor level. A recent seismic upgrade (1992) resulted in an additional 6 feet of concrete being added to the walls, as well as the original brick columns being reinforced with concrete. The columns are now 22 feet across. A concrete block wall was built over the rubble wall in 1992 as well. The original ceilings were replaced with a post and pin batting system and dropped 6 feet to allow for a mechanical HVAC system. City of Seattle 2 ½ inch electrical conduits are located in the ceiling. The floor is covered with new linoleum. The sidewalk in front of the building was replaced in 1992.

Major Bibliographic References

- Personal communication with John Carpenter, Federal Reserve Bank of San Francisco, 10/31/03
- Federal Reserve Bank Building Plans, available at Federal Reserve Bank Building (accessed through John Carpenter, 10/31/03)

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 29/30 Date Recorded 10/14/2003
Site Name Historic Areaways Associated with Building
Common Exchange Building
Field Recorder ENTRIX, Inc.
Owner's Name Walton Exchange Inventory II LLC
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible

☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building(s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System _____
No. of Stories _____

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

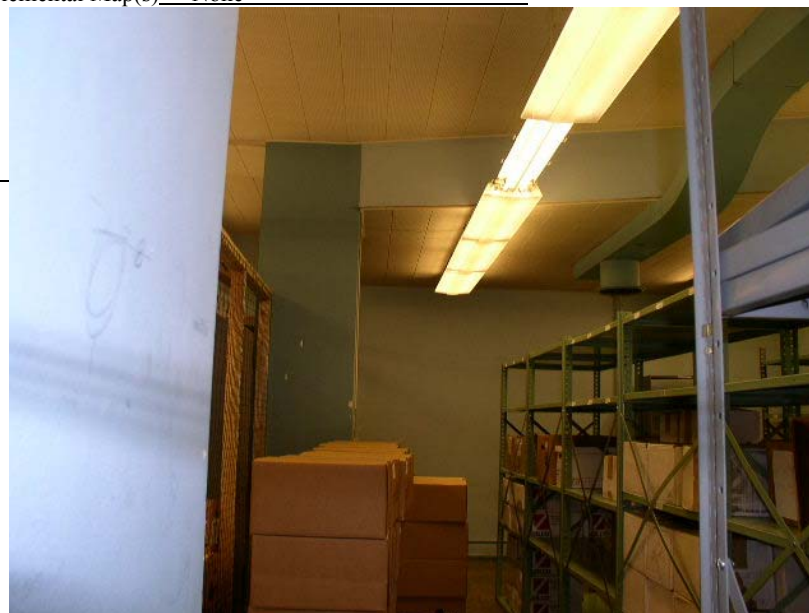
- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) _____	<u>See Page 2</u>			

LOCATION SECTION

Address 821 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 31 Range 25 Section 4 Section SE Section _____
Tax No./Parcel No. 0939000335 Acreage 0.49 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 550051 Northing 5272495
Plat/Block/Lot Boren & Dennys Add/8/1-2&4
Supplemental Map(s) None



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable

☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1929 Architect/Engineer/Builder John Graham, Sr.

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways.

Areaways 29/30 are located in the basement of the Exchange Building, which is located on the southwest corner of Marion Street and Second Avenue. This building is a Seattle Landmark and has been determined eligible for the National Register of Historic Places. The areaways in the basement of the building are currently used as storage area for King County Records.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. Due to the loss of historic integrity, this areaway does not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

This areaway possesses little integrity as many architectural changes have been made over time. Access to the 3rd floor, the lowest below the street, was limited by a wire cage protecting King County records. However, the space appeared to be renovated with little original integrity.

The 2nd floor access point is in a closet space through a small hatch in the wall. A small crawlspace is visible through the hatch with an unexcavated dirt floor and concrete wall facing 2nd Avenue. The ceiling is concrete.

Level 3: Concrete walls may be original. Entire area is caged, no access to rear wall under areaway. Floors have been tiled and ceiling has been renovated.

Level 2: Crawl space below street. Floor is comprised of what looks to be fill dirt that may have been added when area was renovated as a support for exterior walls. Wall facing street is concrete. Ceiling is concrete.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 *Pioneer Square Historic District Areaways Hazard Mitigation Study*. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 31 Date Recorded 11/6/2003
Site Name Historic The Foster & Marshall Building—Areaways
Common United Way of King County
Field Recorder ENTRIX, Inc.
Owner's Name United Way of King County
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible

☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building(s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete ☐ Flat ☐ Monitor ☐ Gambrel ☐ Shed
Plan _____ ☐ Hip ☐ Pyramidal ☐ Other (*specify*) See Page 2
Structural System Wood beams/rebar
No. of Stories _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

PHOTOGRAPHY

Photography Neg. No. Digital
Roll No. & Frame No. NA
View of Areaway along Columbia St., facing west
to corner of 2nd and Columbia areaways
Date 11/6/03

Roof Type

☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) See Page 2
☐ Gambrel ☐ Shed

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 720 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98121
Twp 32 Range 25 Section 4 Section SW Section _____
Tax No./Parcel No. 0939000240 Acreage 0.32 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 550126 Northing 5272438
Plat/Block/Lot Boren & Dennys Add/6/1&4
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable

☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development
- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military
- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (specify) _____
- ☐ Study Unit Sub-Theme (specify) _____

Statement of Significance

Date of Construction_____ Architect/Engineer/Builder_____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 31 is located in the basement of the Foster Marshall Building, which is currently used as offices by United Way. The areaway has been completely remodeled.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. Due to lack of integrity, areaway 31 does not appear eligible for the National Register of Historic Places.

Description of Physical Appearance

Areaway 31 is located in the basement of the Foster and Marshall Building, which is currently occupied by United Way. The building is located on the corner of Second Avenue and Columbia Street. The areaways located along the west and north sides of the building have been thoroughly modified for use as offices. The only portion of the building where the areaway is visible is in a small sprinkler room at the southwest end of the basement. The room measures roughly 10 feet (north to south) by 6 feet (east to west), has concrete walls, and has sidewalk panels exposed on the ceiling. The remaining areaway spaces consist of modern offices with sheet rock walls and drop ceilings. The areaway on the west side of the building extends the entire length of the building. Along the north side of the building the areaway extends north from the west wall about three-quarters of the length of the wall. This areaway is interrupted by a stairway located in approximately the center of the wall. The width of the areaway along the west wall is 12' 10” and the northern areaway is 10'6”.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group
2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 32 Date Recorded 10/14/2003
Site Name Historic Dexter-Horton Building—Areaways
Common Dexter-Horton Building
Field Recorder ENTRIX, Inc.
Owner's Name Pinnacle Management
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible

☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building(s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type concrete
Plan _____
Structural System _____
No. of Stories _____

Roof Type

- ☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 710 2nd Avenue
City/Town/County/Zip Code Seattle, Washington, King, 98101
Twp 32 Range 25 Section 4 Section SW Section _____
Tax No./Parcel No. 0939000260 Acreage 0.65 acres
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 550131 Northing 5272429
Plat/Block/Lot Boren & Dennys Add/6/5-6-7-8
Supplemental Map(s) None



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable

☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (*check one or more of the following*)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (*specify*) _____
- ☐ Study Unit Sub-Theme (*specify*) _____

Statement of Significance

Date of Construction 1924 Architect/Engineer/Builder John Graham, Sr.

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 32 is located in the basement of Dexter Horton Building, which is a Seattle Landmark and has been determined eligible for the National Register of Historic Places as a good example of the work of architect John Graham Sr.. The areaway in this building is used as office space and as an electrical room.

Rating 3: Significant alterations have occurred to the areaway features, but some sense of place remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaway does not appear eligible for the National Register of Historic Places..

Description of Physical Appearance

Areaway 32 under 2nd Avenue is divided into a northern and southern space. The northern space has been completely modified and retains no historical integrity. The southern half of the areaway, beginning at 2nd Avenue and Cherry Streets, retains some original features including a concrete wall, ceiling and portions of original tiled floor.

Section 1, the northern section under 2nd Avenue has been completely renovated. Concrete walls remain, but have been painted. Floor has been carpeted and ceiling has been lowered and finished, no historic material remains visible.

Section 2, from corner of Cherry Street north to Section 1. Concrete walls facing 2nd avenue. Intact black and white tile flooring with trim in portions. Concrete ceiling intact. Rear walls have been covered in plywood.

Overall length of areaway (combined) is 120’ L, width is approximately 7’ in Section 2.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. *Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.*

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 33 Date Recorded 11/11/03
Site Name Historic Areaways associated with building
Common Earl Scheib (Fat City Motors)
Field Recorder ENTRIX, Inc.
Owner's Name Jesse F. Berger and Carol L. Edward
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible

☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type _____
Plan _____
Structural System _____
No. of Stories _____

Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (*specify*) _____
☐ Gambrel ☐ See Page 2
☐ Shed _____

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☒ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (*specify*) _____
☐ Other (*specify*) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (<i>specify</i>) <u>See Page 2</u>				

LOCATION SECTION

Address 508 Denny Way
City/Town/County/Zip Code Seattle, WA 98109
Twp 4 Range 25 Section SW 30 Section _____ Section _____
Tax No./Parcel No. 1991200235 Acreage .31
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549024 Northing 5274152
Plat/Block/Lot Dennys Downtown Park Addition to North Seattle/59-7-8
Supplemental Map(s) _____



High Styles/Forms (*check one or more of the following*)

- | | |
|---|--|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (<i>see below</i>) |
| ☐ American Foursquare | ☐ Other (<i>specify</i>) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- ☐ Gable front
☐ Gable front and wing
☐ Side gable

- ☐ Cross gable
☐ Pyramidal/Hopped
☐ Other
See Page 2

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development
- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military
- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (specify) _____
- ☐ Study Unit Sub-Theme (specify) _____

Statement of Significance

Date of Construction 1900 Architect/Engineer/Builder _____

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaways are located in the basement of the Fat City Garage, historically known as the Earl Scheib Building.. This building is located at the northeast corner of Fifth Avenue and Denny Way. The areaway runs along the west side of the building adjacent to 5th Avenue and is currently used for storage space.

Rating 3: Significant alterations have occurred to the areaway features, but some sense of place remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaways do not appear eligible for the National Register of Historic Places..

Description of Physical Appearance

This building is located at the northeast corner of the intersection of Fifth Avenue and Denny Street. The areaway associated with the building is located under the sidewalk adjacent to the building along Fifth Avenue. Although King County Tax assessor’s records indicate that this building dates to 1910, it appears that the western portion of the building was constructed earlier. Within the areaway, which measures roughly 114 feet long (N-S) and 15 feet wide (E-W), the interior wall of the areaway’s southern two-thirds is constructed of rough stone of varying sizes and includes two windows that have been filled in with brick. The addition of a stairwell on this west wall of the building resulted in a portion of the wall being replaced with concrete block. The interior wall of the newer, northern one-third of the building consists of six concrete columns. The spaces between three of the columns have been filled, while the other spaces are open to the building’s interior garage workspace.

A piling from the Seattle Monorail is located in the middle of the rock retaining wall that forms the west wall of the areaway and borders 5th Avenue. The raised concrete footing of the piling extends approximately 30 feet (N-S) and extends almost the entire width (15 feet) of the areaway. The intrusion of the monorail piling in the retaining wall is approximately 15 feet wide. A small portion of the north end of the retaining wall is poured concrete.

The ceiling of the areaway is deteriorated flat reinforced concrete with exposed rusted members. The sidewalk/ceiling is supported with 13 rusted metal I-Beams spaced 8 feet apart. The height of the ceiling is 7.5 feet. The floor of the areaway is poured concrete.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group
2003 Pioneer Square Historic District Areaways Hazard Mitigation Study. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
420 Golf Club Road SE, Lacey Post Office Box 48343
Olympia, Washington 98504-8343 (360) 407-0752

IDENTIFICATION SECTION

Field Site No. 34 Date Recorded 11/13/03
Site Name Historic Eitel Building - Areaways
Common 2nd and Pike Building
Field Recorder ENTRIX, Inc.
Owner's Name 1507 Group/ Richard Nimmer
Address _____
City/State/Zip Code _____

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible

☐ Determined Not Eligible
☐ Local Designation

Classification: ☐ District ☐ Site ☒ Building (s) ☐ Structure ☐ Object
District Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Not Contributing ☐
District/Thematic Nomination Name _____

DESCRIPTION SECTION

Materials & Features/Structural Types

Building Type _____
Plan _____
Structural System _____
No. of Stories _____

Roof Type
☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Gambrel
☐ Shed See Page 2

Cladding (exterior wall surfaces)

- ☐ Log
☐ Horizontal Wood siding
☐ Rustic/Drop
☐ Clapboard
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) See Page 2

Roof Material

- ☐ Wood Shingle
☐ Wood shake
☐ Composition
☐ Slate
☐ Tar/Built-Up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) See Page 2
☐ Not Visible

Foundation

- ☐ Log ☐ Concrete
☐ Point & Pier
☐ Stone
☐ Brick
☐ Not Visible

Integrity (Include detailed description in Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Change to plan.....	☐	☐	☐	☐
Changes to windows.....	☐	☐	☐	☐
Changes to original cladding.....	☐	☐	☐	☐
Changes to interior.....	☐	☐	☐	☐
Other (specify) <u>See Page 2</u>				

LOCATION SECTION

Address 1511 2nd Avenue
City/Town/County/Zip Code Seattle, WA 98101
Twp 4 Range 25 Section SE 31 Section _____ Section _____
Tax No./Parcel No. 1975700645 Acreage .13
Quadrangle or Map Name Seattle South
UTM References Zone 10 Easting 549673 Northing 5273098
Plat/Block/Lot Dennys A A 3rd Addition/26/10-11
Supplemental Map(s) _____



High Styles/Forms (check one or more of the following)

- | | |
|---|---|
| ☐ Greek Revival | ☐ Spanish Colonial |
| ☐ Gothic Revival | ☐ Tudor Revival |
| ☐ Italianate | ☐ Craftsman/Arts & Crafts |
| ☐ Second Empire | ☐ Bungalow |
| ☐ Romanesque Revival | ☐ Prairie Style |
| ☐ Stick Style | ☐ Art Deco/Art Moderne |
| ☐ Queen Anne | ☐ Rustic Style |
| ☐ Shingle Style | ☐ International Style |
| ☐ Colonial Revival | ☐ Northwest Style |
| ☐ Beau Arts/Neoclassical | ☐ Commercial Vernacular |
| ☐ Chicago/Commercial Style | ☐ Residential Vernacular (see below) |
| ☐ American Foursquare | ☐ Other (specify) _____ |
| ☐ Mission Revival | <u>See Page 2</u> |

Vernacular House Types

- | | |
|---|---|
| ☐ Gable front | ☐ Cross gable |
| ☐ Gable front and wing | ☐ Pyramidal/Hopped |
| ☐ Side gable | ☐ Other |
| | <u>See Page 2</u> |

NARRATIVE SECTION

Study Unit Themes *(check one or more of the following)*

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☒ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science and Technology
- ☐ Special Movements/Organizations
- ☐ Transportation
- ☐ Other (specify) _____
- ☐ Study Unit Sub-Theme (specify) _____

Statement of Significance

Date of Construction 1904 Architect/Engineer/Builder W.D. Van Siclen

- ☐ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☐ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

This study has been prepared to evaluate the historical significance of areaways, defined as the space directly beneath the sidewalk, between the building wall and the street wall. Areaways are a result of turn-of-the-century regrading projects that raised the height of the roadways above the first floor of existing buildings. The City of Seattle covered the area between the edge of the roadway and the building with sidewalks, thereby creating an “areaway” below the sidewalks. Many buildings adjacent to areaways use the areaway for storage, parking/garage, or finished office spaces. The City of Seattle owns the areaways (Parsons Brinckerhoff and Sheridan Consulting Group 2003).

Areaway 34 is located in the basement of the Eitel Building. The Eitel Building, designed by architect W. D. Van Siclen, was constructed for use as commercial and office space, with 33 rooms for rent. The building has housed a variety of businesses over the years, including dentist’s offices, chiropractor’s offices, beauty salons, and jewelry stores. The basement included a night club in recent years. This building is eligible for the National Register of Historic Places. The building’s areaway extends along the 2nd Avenue side of the building.

Rating 4: Little or no historic integrity; all the elements have been removed or covered to such an extent that no sense of an areaway remains. The historical integrity of the areaways has been compromised by the physical alterations described below. The areaway does not appear eligible for the National Register of Historic Places..

Description of Physical Appearance

This building is located at the corner of 2nd Avenue and Pike Street. The areaway associated with the building is located under the sidewalk along 2nd Avenue. Portions of the areaway provided nightclub seating, an enclosed walkway from one portion of the nightclub to another, a kitchen, bar, and dressing room. To accommodate these uses, the areaway walls were surfaced with a rough textured foam and dropped ceiling panels were installed. Where the ceiling panels were broken the flat skylight/sidewalk panels were visible. Within the last two years, the City of Seattle covered the skylights with concrete. The portions of the areaway that are visible through broken ceiling panels, show that it was constructed with concrete walls, and has rusted I-beams supporting the ceiling.

Major Bibliographic References

Parsons Brinckerhoff and Sheridan Consulting Group

2003 *Pioneer Square Historic District Areaways Hazard Mitigation Study*. Prepared for the City of Seattle Department of Transportation Department, Seattle, WA.

Appendix 7

Proposed Mitigation Measures on which the Draft Memorandum of Agreement will be based on

Attachment A: Historic Resources to be Documented

Attachment B: Curriculum Plan Prepared by Heather MacIntosh, Historic
Seattle Preservation and Development Authority

POTENTIAL MITIGATION MEASURES FOR GREEN LINE MEMORANDUM OF AGREEMENT

I. ARCHAEOLOGICAL RESOURCES AND TRADITIONAL CULTURAL PROPERTIES

A. *Preparation of Treatment Plan*

1. Seattle Monorail Project (“SMP”) will develop an Archaeological Resources Treatment Plan (“Treatment Plan”), consistent with the treatment plan provisions set forth in the Green Line Final EIS which were reviewed in consultation with the USCG, SHPO, and affected Tribal Governments. The Treatment Plan will provide for the mitigation of anticipated effects resulting from construction of the Green Line on eligible archaeological resources. The Archaeological Treatment Plan will include the entire Green Line Project. The Green Line EIS and Cultural Resources appendices have identified the locations along the Green Line where eligible archaeological resources could likely be encountered. Since many of these areas have been disturbed in recent history, and it is not known whether eligible resources would be discovered during Green Line construction, this portion of this Agreement makes provision for addressing such discoveries as provided in 36 CFR § 800.6(6).

2. The Treatment Plan will be consistent with the Green Line EIS and the Secretary of Interior’s Standards and Guidelines for Identification of Historic Properties (48 CFR 44716-44742) and Standards for Archaeological Documentation (48 CFR 44734-44737), the Council’s Handbook Treatment of Archaeological Properties (Advisory Council on Historic Preservation, draft 1980), and applicable state regulations, and will be responsive to contemporary professional standards.

3. United States Coast Guard (“USCG”) will ensure that SMP implements the Treatment Plan for the mitigation of anticipated effects on eligible properties.

4. SMP, in consultation with the State Historic Preservation Officer (“SHPO”) and affected Tribes, will ensure the development of site specific Supplemental Treatment Plans as specified below.

5. SMP will prepare Supplemental Treatment Plans (“Supplements”) for eligible archaeological resources identified during construction phases subsequent to approval of the Treatment Plan. Supplements will be approved as described below. Each Supplement will modify the Treatment Plan to be site and property specific. Additional information in Supplements shall include:

a. The archaeological resources discovered or to be affected in the specified project segment and the nature of those effects.

b. Proposed measures to mitigate or avoid adverse effects to archaeological resources identified.

c. Where data recovery is proposed to mitigate an affected eligible resource, the supplement will contain:

(i). Specific research questions and an explanation of their relevance to the overall research goals as established in the Treatment Plan.

(ii). Site-specific fieldwork and analytical strategies that will be employed in data recovery.

(iii). Methods for securing the site against vandalism, if not already protected.

(iv). Schedule for submission of progress, summary and other reports to USCG, SHPO, and affected Tribes.

B. Comments and Concurrence on Supplemental Treatment Plans

1. SMP will submit, within 24 hours of discovery of an adverse effect on a specific eligible archaeological resource, a Supplement to SHPO, USCG, and affected Tribes for review. SHPO, USCG, and affected Tribes will have a maximum of three working days upon receipt to review and provide comments and/or objections to SMP. If SHPO, USCG, and affected Tribes do not submit comments and/or objections within these three working days, SMP shall take such non-responsiveness as concurrence.

2. If any party has an objection to the Supplement, the objection must be specifically identified and the reasons for objection documented in writing to the SMP. Objections will be resolved according to Dispute Resolution procedures of this Agreement.

3. If revisions to the Supplement are needed in response to review, SMP shall make revisions and provide them to SHPO, USCG, and affected Tribes. SHPO, USCG, and affected Tribes will have one working day to review the revisions. If no comments or objections are received within this time frame, SMP will assume concurrence.

4. All Supplements will be deemed finalized when all revisions are made and concurred with by SMP, USCG, SHPO, and affected Tribes, or when any disputes have been resolved as per the Dispute Resolution provisions of this Agreement. Once finalized, any Supplement will be provided to SHPO, Council, USCG, and affected Tribes and SMP may then issue authorization to proceed with implementation of the Treatment Plan and Supplement.

5. SMP may issue authorization to proceed with construction of the Green Line Project in those portions of the right-of-way that contain archaeological properties once agreed upon fieldwork/treatment specified in the Treatment Plans and Supplements has been completed.

C. Monitoring Plan for Construction

1. SMP, in consultation with USCG, SHPO, and affected Tribes will prepare an Archaeological Resources Monitoring Plan to ensure compliance with the Treatment Plan and Supplements.

a. The Monitoring Plan will specify where construction excavation will be monitored in those areas that have been identified in the Green Line EIS as having a likelihood of containing eligible resources.

b. During the construction phase, monthly progress reports regarding monitoring activities will be submitted to SHPO.

2. The Archaeological Resources Monitoring Plan shall address actions to be taken if previously unidentified archaeological resources are discovered during construction.

D. Curation

1. SMP shall ensure that all records and materials resulting from identification and data recovery efforts are curated in accordance with 36 CFR 79. SMP will also consider any claims or conditions recognized as a result of consultation with affected Tribal Governments according to the provisions of the Native American Graves Protection and Repatriation Act (“NAGPRA”) and the National Historic Preservation Act (“NHPA”). All material to be returned to their owners or otherwise repatriated will be maintained in accordance with 36 CFR 79 and Tribal claims or conditions until their analysis is complete and they are repatriated.
2. SMP, in conjunction with SHPO, will facilitate the involvement of appropriate Native American Tribal Governments in the decisions related to final disposition of archaeological artifacts as per RCW 27.44.
3. If a Tribal Government or owner objects to any element of the disposition, it may object in accordance with the procedures outlined in the Dispute Resolution provision of this Agreement, except that objections regarding human remains and cultural items, as defined in NAGPRA, will be resolved between SMP and Tribal Governments in accordance with NAGPRA. SMP shall notify SHPO of any such objections.

E. Native American Human Remains

1. In the case of inadvertent discovery of Native American burials or Native American human remains during construction, archaeological fieldwork, or laboratory analysis, SMP in conjunction with SHPO will attempt to identify the appropriate Native American Tribal Governments with cultural affiliation to the burial(s) or human remains and consult with them over the treatment of remains in accordance with applicable Federal and state law and tribal policy, and in accordance with procedures identified in the Archaeological Resources Treatment Plan.
2. SMP, in consultation with SHPO and affected Native American Tribal Governments, will ensure that any such human remains encountered during construction of the Green Line Project are treated in a respectful manner.
3. If objections are raised regarding treatment of human remains by any party to this Agreement, or by a Native American Tribal Government claiming cultural affiliation with the human remains, the objection will be resolved in accordance with the Dispute Resolution section below

II. Historic Resources

During the environmental review for the Green Line project, an Area of Potential Effects was determined by USCG in consultation with the SHPO and City of Seattle. Historic resources were identified in the Area of Potential Effects, and conceptual guideway and station designs were reviewed for adverse effects on those identified historic resources. Adverse effects were disclosed in the Draft and Final Green Line Environmental Impact Statement, including Appendix N and Appendix NN to those documents. Adverse effects would include visual effects in historic Pioneer Square and at various places along the Green Line guideway where the guideway would be visible from historic resources. A number of potential demolitions of historic resources, which would also be adverse effects, were disclosed in the Draft and Final EIS. The Preferred Alternative in the Final EIS sought to avoid demolition of historic resources where feasible. Of the potential demolitions identified for the proposed Green Line, only three demolitions of resources eligible for the National Register of Historic Places (“NRHP”) are still in the

Preferred Alternative. Those demolitions would include the Federal Reserve building, a single-family residential structure at 3036 16th Ave W, and the existing Seattle Center Monorail. Potential demolitions at other location, such as the Eitel Building, the Centennial Building, and the Dalmasso Apartments were avoided in final project design, although the project will still alter the surrounding environment of those resources. The following stipulations will govern the implementation of the Green Line project.

A. Documentation of Adversely Affected Properties

1. Documentation will be undertaken for identified historic resources that will be demolished or undergo significant physical alteration, including physical alteration of the property's site, due to construction of the Green Line. Documentation will include both web-based versions of the NRHP inventory forms being made available for both the City of Seattle and State of Washington databases and archival film documentation prior to Green Line construction activities. A list of historic resources to be documented in this manner is included as Attachment A to this Agreement. In addition, the NRHP inventory forms for all B level properties inventoried for the Green Line Section 106 consultation, along with a written description of the historic resources documented for the Green Line that builds on the Cultural Resources appendices from the Green Line Environmental Impact Statement, will be entered on both the City of Seattle and State of Washington historic preservation databases.

B. Development of Multi-Media Education Program

1. The Green Line has the potential to expand public awareness of, and public access to, the historic resources of Seattle in a new way. The Green Line will also continue the tradition of public transit, including monorails, in Seattle that has led to the growth of the neighborhoods connected by that transit. In mitigation of adverse effects, the Green Line would take advantage of its location near architecturally significant resources in Seattle, and SMP will fund development of a curriculum and educational program that takes advantage of and builds on the information already prepared in the Section 106 consultation process. The development and implementation of the curriculum for this program would be managed by qualified professionals as defined in Section III of this Agreement, and could be supervised by a recognized organization with historic interest and expertise. A potential framework curriculum and program is more thoroughly described in Attachment B to this Agreement. Elements of the educational program would include the following:

a. Web-based and written materials for self-guided tours of historic resources near the Green Line stations,

b. Partnering with schools to create films and videos related to the history of Seattle areas through which the Green Line passes,

c. Web-based tours that are linked to SMP, Historic Seattle, and City of Seattle websites that allow visitors to experience historic structures near the Green Line corridor, and making that material available to other interested historic resource, museum, educational or community websites, and

d. Community-based materials that provide an overview of the historic resources in individual neighborhoods through which the Green Line passes.

2. SMP will contribute up to \$ _____ toward the creation and implementation of this curriculum and educational program.

C. Kiosks and Displays in Stations Keyed to Educational Curriculum.

1. SMP will prepare and construct interpretive displays in the following six stations that will include historic photographs, information regarding historic and ethnohistoric resources related to that area of the Green Line corridor, and information regarding the community-based materials developed for the multi-media educational program:

- a. 15th Avenue NW/NW Market Street Station (Ballard)
- b. 5th Avenue /Broad Street Station (Seattle Center)
- c. 2nd Avenue /Pike Street Station (Downtown/Pike Market)
- d. 2nd Avenue /Yesler Street Station (Downtown/Pioneer Square)
- e. King Street/Weller Street Station (Downtown/Pioneer Square)
- f. 42nd Avenue SW/SW Alaska Street Station (West Seattle)

2. Each station display will provide historical information and highlight architectural examples for the neighborhoods associated with that area of the Green Line. The displays will reference and incorporate materials developed for the multi-media education program.

3. All other Green Line stations will have smaller displays referencing the resources in that area of the Green Line and directing patrons to the larger resources at other stations and on websites.

4. SMP shall contribute up to the following budgeted amounts for these station displays:

- a. 15th Avenue NW/NW Market Street Station – \$ _____
- b. 5th Avenue /Broad Street Station – \$ _____
- c. 2nd Avenue /Pike Street Station – \$ _____
- d. 2nd Avenue /Yesler Street Station – \$ _____
- e. King Street/Weller Street Station (Downtown/Pioneer Square) – \$ _____
- f. 42nd Avenue SW/SW Alaska Street Station (West Seattle) – \$ _____
- g. All other stations collectively – \$ _____

D. Pioneer Square Station Kiosks and Outreach Plans.

1. Because the Green Line will pass through historic Pioneer Square, at the stations in the Pioneer Square Historic District (2nd Ave/Yesler Street Station and King Street/Weller Street Station), the display will contain additional information regarding community resources and recreational and/or shopping opportunities in the Pioneer Square neighborhood. Input of the community associations in Pioneer Square will be sought in the design of these informational displays. Additionally, SMP will provide funds for an individual or organization whose qualifications are acceptable to SHPO and the City of Seattle Historic Preservation Officer to assist the Pioneer Square business community to develop strategies to encourage monorail passengers to access Pioneer Square using the Green Line and to maximize the potential for the Green Line to enhance the economic vitality of the business community in Pioneer Square.

2. SMP shall contribute up to \$ _____ for these kiosks and identity/business enhancement program.

E. Multi-Media Presentation: Monorail in Seattle Past, Present and Future.

1. Intermediate capacity public transit has played an important role in the creation of Seattle's urban centers. The Seattle Center monorail has helped shape Seattle's urban form and image in the past, and with the advent of the Green Line, monorail transit will play an ongoing role in the City's future image and development. SMP will fund a documentary on the role of monorail transit in the past, present and future of Seattle. This will include a web-based history of the monorail, as well as a portable multimedia presentation and supporting printed materials.

2. SMP will contribute up to \$ _____ for the design and implementation of this multi-media presentation.

F. Station Design

1. In order to mitigate potential adverse effects of station development in the Pioneer Square Historic District, USCG shall require that the designs of the 2nd Avenue/Yesler Street Station and the King Street/Weller Street Station to be developed in consultation with the SHPO as described below.

2. Both the 2nd Avenue/Yesler Street Station and the King Street/Weller Street Station shall obtain a Certificate of Approval from the City of Seattle Department of Neighborhoods and that department's Pioneer Square Preservation Board.

3. The designs for both the 2nd Avenue/Yesler Street Station and the King Street/Weller Street Station, including public spaces, directional and district signage, and landscaping, shall be developed with the objective to be compatible with the historical and architectural qualities of the historic district by ensuring that these station designs respond to the approaches and guidelines set forth in *The Secretary of Interior's Standards of the Treatment of Historic Properties* (U. S. Department of Interior, National Park Service).

4. One goal of the King Street/Weller Street Station design will be to minimize view and proximity impacts to the historic King Street Station to the extent practicable while preserving excellent pedestrian connections with the King Street Station and Weller Street Pedestrian Bridge.

G. Design Review and Approval Process

1. SMP will provide plans and specifications for the 2nd Ave/Yesler Street Station and the King Street/Weller Street Station at the same time that plans are provided to the City during the Certificate of Approval process (including both conceptual and final certificates of approval if applicable).

2. SHPO will review such plans and provide comments to SMP and the City of Seattle Pioneer Square Preservation Board within thirty (30) days of receipt. Failure to respond within thirty days will constitute SHPO review of such plans.

3. SMP would not proceed with station construction until completion of SHPO review and appropriate local review by the City of Seattle.

H. Minimization of Construction Impacts

In order to avoid any potential adverse effect on historic properties situated in the immediate vicinity of project construction and/or construction staging activity, USCG shall require that the following measures, or other measures where applicable, are taken when necessary to minimize construction related impacts on historic properties.

1. Using rigid support of excavation structures (shoring) to minimize the movement of the ground.
2. Ground stabilization through cementitious or chemical grouts, freezing the ground, or other modification techniques.
3. Facades of nearby historic buildings will be protected from accumulation of excessive dirt, or will be cleaned in a manner acceptable to SHPO at the conclusion of construction.
4. Access to all historic properties will be maintained except for unavoidable short periods during construction.
5. Temporary construction sheds, barricades, or material storage will be located so as to avoid obscuring significant views of historic properties.
6. The Project will comply with the City of Seattle noise restrictions for construction and equipment operation (SMC 25.08.425) and any variance granted specifically for this Project.
7. Maintain, relocate or preserve existing granite curbs in the Pioneer Square Historic District.
8. Schedule construction activities so as to minimize impacts to traffic operations.
9. In historic districts, protect public use of work areas involving sidewalks, entrances to buildings, lobbies, corridors, aisles, stairways, and vehicular roadways with appropriate guardrails, barricades, temporary fences, overhead protection, temporary partitions, shields, and adequate visibility. Keep sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, or exits that remain in use by the public clear of obstructions. Post appropriate warnings, signs and instructional safety signs.
10. In historic districts, maintain pedestrian access to businesses during business hours to the extent possible.
11. Maintain day-to-day contact with the owners and/or tenants of historic properties during construction and provide community members with project details that may be relevant to the operation of that property or the businesses in that property
12. Assess structural integrity of historic properties' foundations and structures adjacent to planned construction work. Employ mitigation measures to prevent structural damage to historic structures. Potential mitigation measures could include: modifying the drilling or construction technique, installing recharge wells, and/or adding support to the adjacent structures.
13. Minimize the impacts from any excavation activities through use of adequate shoring or other construction techniques to prevent settling impacts to historic structures.

14. Prior to construction, inspect areaways and other historic resources listed on or eligible for the National Register of Historic Places, the Washington Heritage Register and Seattle City Landmarks within the Area of Potential Effect (APE) and designated in the Final EIS as Fragile or Extremely Fragile by a team of professionals including a vibration specialist, structural engineer, and architectural historian for an inventory of existing conditions. Where the survey finds it necessary based on building condition and final construction details, damage avoidance measures including shoring, bracing, or other appropriate measures will be implemented prior to construction. The findings and mitigation will be provided to SHPO.

15. **Monitoring of Fragile and Extremely Fragile Structures:** A vibration monitoring program similar to the would be implemented for all activities that could produce vibration levels meeting FTA Guidelines for extremely fragile historic buildings and extremely fragile historic buildings (100 VdB re 1 micro/inch/sec and 95 VdB re 1 micro inch/sec respectively) as described in Appendix NN to the Green Line EIS. Vibration monitoring would be undertaken when impact pile driving near fragile and extremely fragile historic buildings. Depending on soil conditions, monitoring would occur when impact pile driving occurs within 150 feet of fragile historic structures and within 250 feet of extremely fragile structures, in consultation of SHPO. Vibration monitoring of sensitive and extremely sensitive historic buildings during any pile driving activity for Green Line construction would be similar to vibration monitoring that occurred during construction of Safeco Field, Seahawks Stadium, and the implosion of the Kingdome. Any damage to historic structures that is documented as a result of construction and caused by the construction of the Green Line would be repaired according to the technical guidance listed in the NPS Historic Preservation Briefs for specific rehabilitation issue.

16. If the results of monitoring indicate significant impacts to the monitored historic structure, work would be stopped and mitigating measures to present vibration impacts would be undertaken. Mitigation measures could be changed construction techniques (such as augured piles), soil augmentation, or support for the affected historic structure.

I. Preservation of Existing Seattle Center Monorail Train Cars

1. The existing Seattle Center monorail train cars are protected by the City of Seattle landmarks designation ordinance, which prohibits modification of the interior or exterior finishes and configuration of those two train cars without a Certificate of Approval from the City of Seattle Landmark Preservation Board.

2. If the SMP is conveyed ownership of those train cars from the City of Seattle, SMP will donate at least one of those train cars to the Museum of History and Industry, subject to final agreement with that institution, for that institution's use in an exhibit.

3. SMP shall preserve the second existing Seattle Center Monorail train car or seek a curator or other museum to accept the second Seattle Center monorail train car for use in an exhibit.

J. Donation of Structure at 3036 16th Ave W

1. The vacant residential structure at 3036 16th Avenue West was determined to be eligible for the NRHP during the Section 106 consultation process. The location of the monorail station at W Dravus/16th Ave W will necessitate removal or demolition of this structure.

2. SMP will contact providers of housing, including low income providers, and offer to donate the residential structure at 3036 16th Avenue West for use as housing.

K. National Register Multiple Property Nominations

1. The Green Line will have a visual effect on several different types of historic resources with varying architectural styles. One type of affected resource affected would be several brick or brick-clad apartment buildings (1910 – 1930) in the Seattle Center and Belltown areas of Seattle. Another type of affected resources would be Craftsman style buildings in the West Seattle area of Seattle. The SMP will fund the following multiple property nominations to the NRHP.

2. Lower Queen Anne/Belltown Apartment Buildings

a. The Multiple Property Nomination will include brick or brick-clad apartment buildings that possess historical or architectural significance in the Lower Queen Anne and Belltown area of Seattle. In addition to the buildings of this type located in the Green Line APE, the nomination will include delineation of an area of Lower Queen Anne and Belltown, including the Green Line corridor, in which these buildings are an important element, with the final number of properties to be included in this nomination to be determined by SMP in conjunction with SHPO and the City of Seattle Historic Preservation Officer.

b. The nomination will include an historical overview pertaining to the development of the architectural styles of these apartment buildings within the Lower Queen Anne and Belltown neighborhoods and inventory forms on both the State of Washington and City of Seattle historic preservation databases. SMP will seek to have at least one of the property owners apply for listing on the NHRP.

3. West Seattle Craftsman Style Buildings

a. The Multiple Property Nomination will include documentation of Craftsman Style buildings that have architectural or historic significance in the West Seattle area of Seattle. In addition to the buildings of this type located in the Green Line APE, the nomination will include delineation of an area of West Seattle, which would relate to the Green Line corridor from 35th Ave SW/SW Avalon Way to Morgan Junction, in which these buildings are an important element. The final number of properties to be included in this nomination will determined by SMP in conjunction with SHPO and the City of Seattle Historic Preservation Officer.

b. The nomination will include an historical overview pertaining to the development of the architectural styles of these buildings within the West Seattle neighborhood and inventory forms on both the State of Washington and City of Seattle historic preservation database. SMP will seek to have at least one of the property owners apply for listing on the NHRP.

4. SMP will contribute up to \$_____ for these Multiple Property Nominations to be allocated as determined by the City of Seattle, which would be responsible for selecting and managing the professionals performing these Multiple Property Nominations.

III. Professional Qualifications

USCG shall require that all historic preservation and archaeological resources work performed by SMP or on its behalf pursuant to this Agreement shall be accomplished by or under the direct supervision of a person or persons who meet(s) or exceed(s) the pertinent qualifications set out in the Secretary of Interior's *Professional Qualification Standards* (48 FR 44738 – 44739).

ATTACHMENT A

Historic Resources to be Documented

Ballard	
Ballard Bridge (B-140)	Recordation and documentation of the historical resource, in accordance with Section 106
Interbay	
Residence at 3032 16 th Avenue NW (I- 26)	Recordation and documentation of the historical resource, in accordance with Section 106
Tsubota Steel and Pipe at 1641a 15 th Avenue W. (I-52)	Recordation and documentation of the historical resource, in accordance with Section 106
Residence at 3036 16 th Avenue NW (I-25)	Recordation and documentation of the historical resource, in accordance with Section 106
Seattle Center	
Dalmasso Apartments (SC-8)	Recordation and documentation of the historical resource, in accordance with Section 106
Seattle Center Monorail Terminal, Office, and Track (SC-16)	Recordation and documentation of the historical resource, in accordance with Section 106
Downtown	
King Street Station, 301 S. Jackson (D-126)(if not already completed by others)	Recordation and documentation of the historical resource, in accordance with Section 106
Doyle Building at 1527 Second Avenue (D-49)	Recordation and documentation of the historical resource, in accordance with Section 106
Eitel Building at 1511 Second Avenue (D-57)	Recordation and documentation of the historical resource, in accordance with Section 106
Federal Reserve Building, 1015 Second Avenue. (D-67)	Recordation and documentation of the historical resource, in accordance with Section 106

ATTACHMENT B

CURRICULUM PLAN

(Prepared by Historic Seattle)

TABLE OF CONTENTS

INTRODUCTION

BALLARD

- A. The Storyboard Walk
- B. “Ballard: Shingle Capitol of the World!”

INTERBAY

- A. Fish Tales: Fisherman’s Terminal
- B. Ecosystems Management
- C. A History of Water

QUEEN ANNE/SEATTLE CENTER

- A. Lost in Translation (also system-wide)
- B. “It Happened At the Worlds Fair”

BELLTOWN

- A. The Historic Taverns of Belltown
- B. Regraded, Computer Aided

SECOND AVENUE

- A. Breaking the Mold
- B. Peeling the Canyon

PIONEER SQUARE/KING STREET STATION

- A. Virtual Tour of the Underground City
- B. Anatomy Lessons

SODO

- A. Sports in Seattle
- B. Reclamation Animation
- C. Manufacturing Seattle

WEST SEATTLE

- A. Ten Bridges to West Seattle
- B. Some Assembly Required

INTEGRATING THE PROJECTS

APPENDICES

- A: What are EALRs?
- B: What is Photogrammetry?

INTRODUCTION

Ballard

Educational programming and outreach will be one component of a comprehensive mitigation program established to offset the monorail's impacts. This document is a compendium of general ideas that might be developed more fully into classroom projects, web-based curricula and/or non-academic use, or on site educational efforts placed in either monorail cars, monorail stations or both. Great consideration should be given to integrating the process and products of these projects into the monorail's public art program and design elements in monorail's infrastructure. Most of these projects have strong graphic components that could guide artists engaged in the monorail project.

Essential Academic Learning Requirement (EARLs) categories are listed within each project description. These requirements, established by the Washington state Office of the Superintendent of Instruction, are in place to create a standard framework for statewide education. An explanation of individual EARL areas is included as Appendix A.

All ideas will need further expansion prior to implementation. This document is intended to scope out concepts, like a schematic drawing rather than a finished set of construction documents. Given the time constraints of this outlining effort, budgets for individual projects are not explored, although general funding issues are mentioned, as are potential funding partners on individual projects.

In some cases, individual organizations scoped out as potential partners in these projects, and funding sponsors, have not been contacted. Groups are suggested based on past work and expressed interest in programs similar to those outlined in this document. An explanation of these partners or participants, and their strengths as related to one or more of the projects outlined in this document, is included as Appendix B.

All ideas will need further expansion prior to implementation. This document is intended to scope out concepts, like a schematic drawing rather than a finished set of construction documents.

Projects suggested follow from the following premises:

- People learn differently. Projects will address differently learning styles, and ideally incorporate more than one sense.
- Use of new technology in educational outreach is consistent with the character of the Seattle Monorail Project as a whole.
- The nature of the Seattle Monorail Project and its location within one of the nation's testing grounds for emerging technologies suggest that educational outreach concepts could push the boundaries of existing technology-driven coursework and web-based applications.
- All projects are interdisciplinary.
- Learning can be entertaining.
- Partnerships and creative collaboration are fundamental to the success of these conceptual ideas.

A. The Storyboard Walk

Project Partners:

Educational Partner

Nordic Heritage Museum

Public Artist

Jack Straw Foundation

Ballard Chamber of Commerce

EALRs

Art

Communications

Social Studies (Geography, History)

Applications

Book

Web

Public Art

Exhibit

Background

Originally an incorporated city, Ballard maintains a character district from the rest of Seattle, and is proud of its history. Over the past several years, the neighborhood has seen a quiet but steady revitalization. The organizational stewards of Ballard's history, the Ballard Historical Society and the Nordic Heritage Museum have produced a series of programs that highlight the story of the place that could be built upon and incorporated into a creative educational program aimed at younger students.

Project Description

This project involves storyboarding the history of Ballard as told in the book *Voices of Ballard*, and in the archives and publications held by the Nordic Heritage Museum. These storyboards will be translated into a linear narrative of the place through panels or images in the station design or the monorail's infrastructure near the station with the help of a local artist with teaching experience comfortable working with younger students. Original art produced as a part of this project will be incorporated into an interactive exhibit at the Nordic Heritage Museum incorporating sound (sound recordings and conversations with elders in the neighborhood) that help explain and enliven student's drawings.

These drawings might also be printed in book form, or could be used as the basis for animated shorts describing life in Ballard in years past. The storyboarding theme would carry through whatever final products are explored and implemented.

Products:

Public art

Interactive, multimedia exhibit at the Nordic Heritage Museum

Animated shorts storyboarded by project participants, based on student's drawings

B. Ballard: Shingle Capitol of the World!

Project Partners:

Educational Partner

Nordic Heritage Museum

Museum of History and Industry

Jack Straw Foundation

Ballard Chamber of Commerce

Wiggly World Studios (Northwest Film Forum)

EALRs

Art

Communications

Social Studies (Geography, History)

Applications

Film/DVD

Web

Exhibit

Background

Lumber, milling, and wood processing were major industries in 19th and early 20th century Seattle. Ballard was the epicenter of this economic activity, once calling itself "The Shingle Capitol of the World." The story of timber and wood processing joins together the history of natural environment, Seattle's economic roots, Port activity, and Ballard's development.

Project Description

Students will create a “promotional” film entitled “Ballard: Shingle Capitol of the World!” based on institutional films of the 1940s and 50s using black and white archival film footage of saw mills from the period, and historical photographs housed in a variety of local archives. Students will also interview potential voiceover candidates to play the “narrator/salesman” role. Students will learn about the history of area sawmills, historic labor and safety issues, Ballard’s economic development, and the relationship between the working waterfront and Seattle’s industrial history.

Working with a museum partner, students will adapt research and writing into an exhibit on the timber industry and wood processing, based on what they learned making the film.

Products:

Film, “Ballard: Shingle Capitol of the World!”

Multimedia Exhibit: Ballard: Shingle Capitol of the World

A. Fish Tales

Project Partners

Fisherman’s Terminal

Nordic Heritage Museum

Maritime Heritage Foundation

Museum of History and Industry

Burke Museum of Natural History and Culture

A Public Artist

Pete Knutson

Allied Arts

HistoryLink

Jack Straw Foundation

EALRs

Communications

Social Studies (History)

Applications

Web

CD

Interactive Exhibit

Background

Fisherman's Terminal has a rich history deeply connected to Seattle's roots as a port and hub of the fishing industry in the Northwest. For generations, fishermen and women have made the terminal a part of their home, either by living in their boats moored on the facilities, or by maintaining moorage established by their ancestors. The fishing community has been significantly affected by economic and technological changes, which have resulted in fewer and fewer fisherpeople operating out of Fisherman's Terminal. The Port of Seattle, over the past few years, adapted to these changes by allowing some pleasure boat moorage on the facility. This resulted in some local controversy.

Allied Arts of Seattle led an effort to raise awareness about the changes. Historic Seattle sat in on a number of meetings between the Port of Seattle, members of the fishing community, Allied Arts, and other interested parties including University of Washington professor Gail Dubrow. Fisherman Pete Knutson, also a professor of anthropology at Seattle Community College was a primary advocate for respecting the extant fishing community at the terminal.

Project Description

Students will document the memories of remaining members of the fishing community operating out of Fisherman's Terminal through audio and video recordings. Students will research the history of the site in local photographic archives, and produce a documentary film on the Terminal based on first hand accounts. Working with a local museum partner, students will adapt portions of their work into interactive exhibits that help explain a number of key themes including:

- Different methods of fishing: skein, net, line, etc.
- How Fisherman's Terminal has physically changed over time
- What it's like to live on a fishing boat

Products

30 minute film on Fisherman's Terminal

Interactive exhibit

Web-based virtual tour of Fisherman's Terminal

A collection of oral histories in audio form, transcribed for posting on HistoryLink

Potential Funding Partners

Port of Seattle

PBS affiliate

B. Ecosystems Management: Submarine Mapping, Documentation and Interpretation

Project Partners

Fisherman's Terminal

Nordic Heritage Museum

Maritime Heritage Foundation

Museum of History and Industry

Burke Museum of Natural History and Culture

A Public Artist

Pete Knutson

Allied Arts

Puget Sound Keepers Alliance

United Tribes of All Nations (or an individual tribe)

University of Washington, Urban Ecology Program

EALRs

Health and Fitness

Science

Social Studies (History)

Applications

Web

CD

Interactive Exhibit

Background

Fisherman's Terminal has a rich history deeply connected to Seattle's roots as a port and hub of the fishing industry in the Northwest. For generations, fishermen and women have made the terminal a part of their home, either by living in their boats moored on the facilities, or by maintaining moorage established by their ancestors.

Prior to 1913 when Fisherman's Terminal was established, the Shilshole tribe called Salmon Bay (also Shilshole Bay) their home.

Given the long history of continuous fishing-industry use at the site, a collection of odds and ends from a century's worth of boats, as well as some entire vessels, sit at the bottom of the bay. The site brings together lessons on our region's ecology, prehistoric conditions, as well as cultural and economic history.

Project Description

Students will research the history of Fisherman's Terminal and the ecological systems in Salmon Bay, then bring cameras underwater. Using photogrammetry, the surface of land underwater will be mapped out in a digital 3-D model. Working with environmental scientists and exhibit designers, students will create an interactive exhibit that opens the public's eyes to the many systems and histories coming together at Fisherman's Terminal.

PRODUCTS

Interactive exhibit

Web-based underwater virtual tour of Fisherman's Terminal

A series of underwater photographs

Potential Funding Partners

Port of Seattle

National Science Foundation

National Parks Service, Maritime Heritage Grant Program

Brainard Foundation

C. A HISTORY OF WATER

Project Partners

Educational Partners

University of Washington

Urban Ecology Program, University of Washington

Burke Museum

Museum of History and Industry

Port of Seattle

Seattle Aquarium

Coast Guard

Lake Washington Ship Canal and Hiram S. Chittenden Locks

Seattle Public Utilities

EALRs

Art

Science

Social Sciences (Geography, History)

Applications

Background

Seattle's relationship with water is integral to its character, both natural and cultural, and its quality of life. The story of water in Seattle is, in many ways, a comprehensive view of the city's past, with implications for the present and future. Seattle's history of dramatically altering the environment through regrades and canal cuts, changed the character of the city and had an impact on the ecosystems supporting life here. Changes to the grade of the land meant dumping tons of earth into the Elliott Bay. Lake Washington's shoreline was altered by the Montlake Cut. Extra real estate was created by lowering Green Lake. Industrial activity along Lake Union, especially the operation of a gasification plant (now Gas Works Park) polluted area water for decades. We are still in an age of remediation.

Seattle's environmental health and the quality of the water have played a part in Seattle politics since the 1950s when the problems of pollution entered the public sphere in a significant way, and began Seattle's steady move toward environmental awareness which is integral to its overarching ethics today as manifest in public policy and in the prevalence of nonprofit groups and agencies dedicated to the quality of water and our natural environment.

In addition, Seattle's port activity and the fishing industry have been an economic engine throughout the city's development. The list of connections between Seattle and the water is potentially limitless.

Project Description

Students will research the history of water by first establishing primary themes, then will divide into project groups or teams which will elaborate on ways to tell the story of their specific interest. Students will be encouraged to think about relationships between the themes.

Students will prepare visual presentations to a team of artists who will help develop a series of works in and around Interbay related to these themes. These works may be incorporated into the design of the Interbay station and/or its surrounding infrastructure.

Working together, the teams will create an exhibit on the story of water in Seattle, both for the Web, and as an interactive exhibit in a local museum (either natural history or history), or incorporated into the facility at the Ballard Locks or at Fisherman's Terminal.

Potential Funding Partners

Seattle Public Utilities

Port of Seattle

Queen Anne/Seattle Center

LOST IN TRANSLATION (ALSO SYSTEM-WIDE)

Project Partners:

Educational Partner

Burke Museum

Museum of History and Industry

United Tribes of All Nations

Seattle Center

Jack Straw Foundation

Washington State Office of Archaeology and Historic Preservation

Washington State History Museum

KCTS

HistoryLink

EALRs

Communication

Social Studies (History, Geography)

Applications

Film

Web

Interactive Exhibit

Background

The story of indigenous tribes in the Seattle area has historically been distorted – from Chief Seattle’s speech, to the location of a historic potlatch site at the base of Queen Anne Hill that never existed. The

latter fact didn't deter early Seattlites from celebrating the idea in an annual potlatch parade and festival, even though the tradition of gift giving and celebration was not a part of local tribe's culture. The Potlatch Parade, commemorating the first load of gold from the Klondike River that sparked the local economy, was an idea born of boosterism and an overgeneralized idea about native customs.

The Seattle Monorail's Green Line runs along the site of the imagined "potlatch meadows" around Seattle Center, and along the Potlatch Parade route on Second Avenue. The line also runs along two tidal areas where the real story of tribal occupation might be told.

Project Description

Students will interview local tribes, historians and archaeologists and compare their views on the story of indigenous tribes with what has been told about them and how they are portrayed today in public art, and even in the City of Seattle's seal. Pioneer Square, Belltown, Seattle Center and Second Avenue all contain small interpretations of native culture, most of which are ignored by passersby.

The Museum of History and Industry presented a highly popular exhibit entitled "A Change of Worlds" from January 1999 to July 2001 that touched on the issue of native stereotypes perpetuated in images of indigenous people. This proposal expands on some ideas raised in this exhibit and provides a thoughtful and engaging means by which students and the general public can understand the relationship between native cultures and the story of the city.

Students will map out areas along the Green Line (with the help of the archaeological investigation and research work associated with the environmental impact statement) that are associated with native settlements and activities, and the art, architecture and public spaces that contain images or references to Native Americans. Students will then create an interactive map of the city including these sites.

The interactive map might be available online and in monorail stations, and an expanded version of the work conducted by students might be adapted into a museum exhibit. Students will be encouraged to think expansively about how best to communicate the information they gather, and the bigger issues implied by their work. This may include a documentary film on the topic depending on the receptiveness of local tribes.

Products:

Interactive map

Oral histories (to be transcribed, edited and posted on HistoryLink)

Possibly a documentary film

Multimedia museum exhibit

Sponsorship Partners:

Media sponsor (radio, television, newspaper)

B. It Happened At the World's Fair: Sight, Sound and Memory at Seattle Center

Project Partners:

Jack Straw Foundation

HistoryLink

School Partner

Seattle Center

Experience Music Project

Film entity with editing equipment (television sponsor)

Newspaper sponsor

NPR (local affiliate KUOW)

KCTS

Museum of History and Industry

DoCoMoMo.WeWa

EALRs

Communication

Social Studies (Geography and History)

Art

Writing

Applications

Classroom

Web

DVD

The 1962 World's Fair was a significant event in Seattle's history, and produced a lasting impact on the built environment. The Space Needle, the 1962 Monorail, and the fair grounds have all played a part in creating a "center" at the north end of downtown. The film, "It Happened at the World's Fair" helped to popularize the event that touched many Seattle-area residents. Many attendees still live in the Seattle area, and have home movies, photographs, ephemera and stories about the event. The construction of the Space Needle was documented on film and is currently being used in a welding class at South Seattle Community College.

Project Description

This multimedia project will include interviews with fair attendees and staff, and others who were instrumental in the development of the fair, home movie footage, music from the fair, sound recordings from the fair grounds today (especially the sound of the 1962 Monorail), simulations of sounds from the past, stills of fair promotional material, and photographs from the Museum of History and Industry, to create a series of short films and radio programs about the 1962 Worlds Fair, beginning with the development of the idea and the clearing of the land to the role of the 1962 Monorail in the development of the Green Line project.

Other subjects might include:

- Art exhibited at the Fair
- The role of modern design within the architecture and planning of the Fair.
- The construction and design of the Space Needle
- The construction and design of the Monorail
- The role of the fairgrounds on Lower Queen Anne
- Adaptation of buildings and sites on the fairgrounds, including the reuse of the Armory Building as the Center House, the Opera House alterations, changes to the fountain, i.e. the evolution of the place as a civic center.
- Visions of the future: technology then and now, e.g. Bubblator, monorail, moving sidewalks.

Students will conduct interviews and learn about radio and television production including scriptwriting, editing and promotion.

Products:

Oral histories, which will be archived at the Museum of History and Industry

Transcriptions of oral histories, which will be edited and posted on HistoryLink.org

4 short films, to be shown on KCTS

8 radio programs

Potential Funding Partners:

City of Seattle

Seattle Center Foundation

National Endowment for the Arts

National Endowment for the Humanities

BELLTOWN

A. THE HISTORIC TAVERNS OF BELLTOWN

Project Partners:

Belltown Business Association

Northwest Gay and Lesbian History Project

Professional historical consultant/researcher

Allied Arts

Historic Seattle

Jack Straw Foundation

EALRs (this is a project designed to involve the non-academic community, not students under 21)

Applications

Web

Book/Brochure

Background

Social drinking in Seattle remains a favorite pastime, and is a historic tradition in Pioneer Square* and Belltown. Belltown's character has significantly changed over the past decade with the development of highrise condominiums and the presence of more and more middle and upper income residents. The area was, for most of its development history, a low rise, low income neighborhood near the commercial downtown, home to the working class employed on the waterfront or as machinists, tailors, waitresses, and bar keeps.

While many of Belltown's old taverns and bars have been demolished, a number still remain, as do bartenders, waitresses and performers who remember its bawdier days.

Project Description

Volunteers, directed by a professional historical consultant, will document the historic social drinking places of Belltown, and interview those who still remember what the neighborhood was like from the 1940s until the 1980s when gentrification began. Research and sound recordings will be edited into an interactive web-based map of a historic tavern district, along with "now and then" photographs of buildings and people past and present.

The interactive map will be available in kiosks at the proposed Belltown monorail station at Fifth and Bell Street, as will take-away brochure versions including listings of all contemporary drinking establishments, historic and new. The web-based map may be hosted by the local business association or some other business-oriented group.

Products:

Interactive map

Guidebook or brochure

Landmark district nomination

Sponsorship Partners:

Media sponsor (radio, television, newspaper)

*adapting this project to Pioneer Square is not advised. That community has serious problems with chronic inebriates and a bar scene that sometimes gets out of hand. The project might provoke more community outcry than good will.

B. Regraded, Computer Aided

Project Partners:

University of Washington Special Collections/Maps

City of Seattle Municipal Archives

Belltown Chamber of Commerce/Business Association

Army Corps of Engineers

Engineering Partner

University of Washington Applied Sciences/Urban Ecology Program

Technology Partner

Museum of History and Industry

EALRs

Art

Social Sciences (History, Geography)

Science

Mathematics

Applications

Web

Interactive exhibit

Background

One of the most significant and dramatic chapters in Seattle's history, the regrading of large portions of downtown forever shaped business and development in the Northwest metropolis. Fantastic photographs have documented the monumental process of washing away Seattle's hills into Elliott Bay. The story of the regrades (there were several phases of a decades long effort) is hard to tell with words – its impact was physical, and a reflected view of the land much different than ours today.

Project Description

Using historic maps and photographs, documentation about the regrades, and digital geographic data, students will recreate the topography of pre-regrade Seattle in a physical 3-D model, then simulate the series of regrades that gave our city its shape today. This model, which will be photographed in the manner of stop-action animation, will aid in their understanding of alterations in the landscape, and will help form the datum for the digitized version.

An expanded version of this project could explore the geology and seismicity of Seattle's soils downtown, which could, in itself, prove to be a valuable educational tool for the community as a whole.

Students will work with the Museum of History and Industry to understand how to incorporate digital and physical models into an interactive exhibit.

Products:

- Interactive educational exhibit(s)
- Animated short of man-made alterations to the land in downtown Seattle, which might be adapted to a popular screen saver

SECOND AVENUE

1.1.1.1 A. Breaking the Mold: Terracotta Seattle

Project Partners

Educational Partner

Allied Arts of Seattle

American Institute of Architects, Seattle Chapter

Historic Seattle

Seattle Art Museum

Pratt Art Institute

City of Seattle, Design Commission

King County Cultural Development Authority

EARLS

Arts

Science

Social Studies (History)

Applications

Public Art

Web

Text

Background

Terracotta gained popularity in Seattle as a primary cladding material in the 1910s and 20s as the city was maturing into an urban metropolis. The medium lent itself to impressive, sometimes fantastic expressions which are now a part of our architectural heritage and the character of public space downtown.

Many of the buildings along Second Avenue built in the 1910s and 20s include exceptional terracotta detailing.

Project Description

Project participants, including professional designers, students, historians, and architects will document and research terracotta buildings downtown, expanding existing documentation including Allied Arts “Expressions in Terracotta” which was published in 1986 with a map of significant buildings. This group will then produce a series of terracotta works, either as an installation in the Second and Pine Station, or nearby, or in all Second Avenue stations. A subgroup will be responsible for generating a thematic landmark district nomination, and another will translate the nomination into a virtual tour available on the web and/or an interactive kiosk at the Second Avenue station.

Products

Series of public art works

Thematic landmark nomination of terracotta buildings in Seattle’s downtown

Virtual online tour of terracotta buildings

B. Peeling the Canyon: Seattle's Second Avenue Revealed

Project Partners

Educational Partner

Downtown Seattle Association

University of Washington Applied Physics Department

National Park Service

Washington State Office of Archaeology and Historic Preservation

Historic Seattle

Engineering Partner(s)

Historylink

EALRs

Arts

Mathematics

Social Studies (Geography, History)

Science

Applications

CD/DVD

Background

Seattle's Second Avenue is one of downtown's most historically significant thoroughfares and streetscapes. For decades, the wide street, lined with some of the city's most exceptional examples of terra cotta cladding, was a processional route for parades and presidential visits. The design, construction and materials used in this route could tell many stories at once about the role of labor, art, and engineering in the shaping of downtown Seattle.

Labor, as a political, social and economic force within the city of Seattle and the region, has been examined in many publications, but its relationship to the built environment, though important, is generally overlooked, or buried within larger histories. Historic buildings along Second Avenue required significant skilled labor and precious materials including stone and terracotta which were much cheaper in the 1910s and 20s when the majority of these structures were built.

The "Canyon of Dreams" will be effected by the presence of the monorail. Documentation of the current conditions on Second Avenue should be a part of mitigation outside of educational outreach, but the

means by which this documentation occurs could provide an extraordinary view of these exceptional buildings and the historical contexts which created them.

Project Description

Using photogrammetry and computer aided architectural design, high school students will create a digital 3-D model of Second Avenue. The larger program will eventually result in an interactive model of the street, which allows the user to “peel away” building facades to reveal structural systems and significant historical interiors, especially those in lobbies of landmark buildings. Strands of relevant histories will be told through an exploration of simulated spaces, or selected as a “mode of inquiry” at the onset of the program, much like selecting “director’s commentary” on a DVD of a film.

Sound might be incorporated to enhance the simulated experience, and include snippets of explanations from local architects, engineers and architectural historians, and popular music from the 1910s and 20s. Themes addressed as a part of research for this project may include:

- The history of terra cotta in the Seattle area, its production and popularity along Second Avenue
- Labor and the construction trades in downtown Seattle
- Explanation of different architectural styles illustrated on Second Avenue
- The emergence of the tall (and ornate) office building in Seattle, and the nation.

Products

Interactive digital 3-D model of Second Avenue

Potential Funding Partners

Paul Allen Virtual Education Foundation

Preservation Training and Technology Program

PIONEER SQUARE/KING STREET STATION

A. VIRTUAL TOUR OF SEATTLE’S “UNDERGROUND CITY”

Project Partners

Underground Tours

Pioneer Square Community Association

Klondike Gold Rush Museum

Seattle Department of Transportation

Architectural design partners

Engineering partner

Project Impact (A Program of FEMA)

EALRs

Social Studies (Geography, History)

Science

Applications

Web

Interactive Exhibit

Background

As a part of the regrading of Seattle, Pioneer Square was raised approximately one story in most places, as was the southern part of the downtown core. This alteration of the street level left cavities underground called *areaways* which preserve, in some cases, the original street level store fronts. Construction of the areaways is generally brick masonry, and is a unique and popular attraction in the Pioneer Square neighborhood, attracting millions of tourists each year.

In 2000, the Seattle Department of Transportation began a project to repair and in some cases fill in Seattle's areaways to protect the neighborhood against unstable passages underground, and to improve those areaways with significant architectural qualities. The Nisqually Earthquake of 2001 damaged five areaways that have since been repaired or filled in with removable lightweight concrete.

Pioneer Square's vulnerability to earthquakes and the regrading of downtown can be understood through the engineering and rehabilitation of these areaways. Seattle's development on glacial till soil, and the geomorphology of the land underlying the district before the regrades and tideflat reclamation began are part of this story.

Project Description

Starting with existing research on Seattle's areaways, and working with Underground Tours, students will create a digital 3-D model of Seattle's underground and its underlying soils. This model will include only simple outlines of above-grade buildings, and will provide a visual explanation of 1) why Pioneer Square is more susceptible to earthquakes than other parts of the city, 2) what the underground looks like, as a system of spaces, how it was put together, and 3) information about original businesses occupying the level obscured by the regrade effort.

Products

Interactive Web-based exhibit

Potential Funding Partners

Underground Tours

B. ANATOMY LESSONS

Project Partners

WashDot

RTA

Educational Partner

Seattle Architecture Foundation

Historic Seattle

Smith Tower

EALRs

Art

Communications

Social Studies (Geography, History)

Science

Applications

Web

Interactive Exhibit

Background

King Street Station, built in 1906, was Seattle's first grand railroad station. The city put up with a number of modest, wood frame depots before the Northern Pacific's James Hill invested in a brick station at the south end of town designed by Charles Reed and Allen Stem, architects of New York's Grand Central Station. Based on the design of Venice's San Marco, the architects created a true landmark hinging together two historic districts – Pioneer Square and the International District.

Use of the station, and its neighboring Union Station, declined after World War II, and both buildings fell into disrepair. Union Station was rehabilitated and adapted into new offices for Sound Transit in the late 1990s. King Street Station remains deteriorated, but with great plans for its ultimate revival as an operating landmark. It maintains a place on the National, state and local landmark registers, and has much to teach about the historic role of transcontinental railroads in Seattle, and the function of grand railroad stations.

Smith Tower, one of Seattle's most beloved landmarks, and for a brief time the tallest building West of the Mississippi, stands directly across from the proposed "Sinking Ship" station. Its base will be partially blocked, visually, by the presence of the monorail's guideways.

Project Description

Through photogrammetry integrated with existing computer-generated plans and elevations, students will develop interactive, web-based models of King Street Station and Smith Tower that allow virtual visitors to take the building apart and examine its historic spaces and their uses. The model will also demonstrate how the buildings have changed over time (or not), with opportunities for the “visitor” to learn more about the many reasons why the building was used and then disused, and plans for rehabilitation.

Products

Interactive 3-D models of King Street Station and Smith Tower, exterior and interior

Potential Funding Partners

WashDot

Preservation Training and Technology Grant Program

SODO

A. SPORTS IN SEATTLE

Project Partners:

First and Goal

Vulcan

Seattle Seahawks

Seattle Mariners

Museum of History and Industry

HistoryLink

Educational Partner

Jack Straw Foundation

EALRs

Art

Communication

Social Studies (History)

Applications

Web

Background

Large sports arenas have been a primary force in SODO's recent history and real estate development. The developments, begun in controversy in the 1960s with discussions about the Kingdome, relate to Seattle and the region's longtime love of sports and their increasing role in economic development. The history of sports in Seattle ties together a number of Seattle neighborhoods, and the city's racial history. The Negro Leagues, and other examples of organized sports' segregation prior to Jackie Robinson's contract with the Brooklyn Dodgers are one piece of this story, but there are many that could contextualize the new developments in SODO for Seattle's sports fans today.

Project Description

Through interviews and archival research, students will develop a comprehensive history of sports in Seattle, especially baseball, football and soccer. They will create a timeline of big events in local sports history and a map of Seattle's historic sporting venues that will be adapted for the web and hot linked to articles about the sites. This will be available for use in the SODO station closest to the stadiums. Students may also adapt their work into an exhibit to be located in one or both of the SODO sports stadiums.

Products:

- Oral history interviews, which will be transcribed, edited and posted on HistoryLink
- An interactive exhibit, to be located within one or both of the sports stadiums
- A web-based interactive map of sports activity in Seattle linked to brief articles on the sites and streaming audio of relevant interviews.

Sponsorship Partners:

Media Partner(s) (radio, television, newspaper)

Seattle Mariners

Seattle Seahawks

B. RECLAMATION ANIMATION

Project Partners:

United Tribes of All Nations

University of Washington, Urban Ecology Program

Burke Museum of Natural History

SODO Business Association

Starbucks Corporation

Gregory Broderick Smith Real Estate

Nitze Stagen

Port of Seattle

EALRs

Art

Communication

Science

Applications

Web

Film

Background

South Downtown, the area now known as SODO, is a manmade stretch of land built over the course of several decades between the 1890s and 1930s. This effort reflects a view of the land illustrative of a prevailing idea of the late 19th and early 20th century, with human ingenuity as supreme, natural resources as commodities, and land as a blank canvas.

The tideflats, prior to reclamation, were home to a number of native species of flora and fauna, and had significance to the native population prior to white settlement. This area, and the land around it were initially claimed by the railroads whose trestles transected the marshy expanse and formed the spine of future tidelands development. Integrally related to the regrades, both in engineering and purpose, the shaping of SODO and its recreation of an ecosystem is relevant to present and future development. SODO is poised again for change with proposals to develop surplus waterfront Port of Seattle property for high-rise residential development helped along by the presence of the monorail.

Manmade Harbor Island, related to SODO in its historic industrial use, will also be affected by the presence of the monorail that will arch over it as it moves on or beside the West Seattle Bridge.

Project Description

During a year-long course, the University of Washington's Urban Ecology Program, working with a local high school strong in technology, will create an interdisciplinary visual narrative of the tidelands and Harbor Island from their geologic inception to the present day. The end product will be an animated short that relays this story with little or no text. Graduate students at the University of Washington will produce a series of papers on this topic that will contribute to future research and EIS work conducted for the purposes of development in the SODO area.

Products:

- Animated short film on the evolution of SODO, from its geologic beginnings to the present day.
- Series of papers on elements of the research that will aid in future development of SODO and better understanding of the ecological and economic systems governing the area, and the potential impact of changes on the industrial zone.

Sponsorship Partners:

South Downtown Foundation

National Science Foundation

Paul Allen Virtual Education Foundation

Gregory Broderick Smith Real Estate

C. MANUFACTURING SEATTLE

SODO Business Association

AFL-CIO

Museum of History and Industry

HistoryLink

Society for Industrial Archaeology

Pacific Northwest Labor History Association

Jack Straw Foundation

EALRs

Art

Science

Social Studies

Applications***Public Art***

Interactive Exhibit

Web

Background

Labor in Seattle has influenced regional politics and the overarching character of the city since its early days as a pioneer town at the edge of Washington Territory. Labor, the city's industrial base, Port activity, and the transformation of the Seattle landscape are no better illustrated than in the SODO area. For most of its history, since the reclamation of the tideflats in the early 20th century, the area has been associated with light industry, which was dependent on the location of the train stations and rail lines at the south end of the downtown core.

Project Description

Students will research the history of manufacturing in SODO and accumulate a series of photographs and drawings that help tell this story. Students will also record first hand accounts from workers who remember the area prior to the development of the sports stadiums and the identification of the place as SODO (South of the Dome). These students will create a series of visually-strong presentations about the history of the district, and incorporate these into a web-based exhibit with streaming audio links to interviews.

Presentations will be made to public artists working on designs for the SODO station and potentially translate stories and explanations of manufacturing methods into public art. This could be a series of kinetic art works that suggest the working, industrial character of the district.

Products

Kinetic art

Oral histories to be transcribed, edited and posted on HistoryLink.org

Interactive online exhibit

Potential Funding Partners

Stadium Authority (First and Goal?)

Starbucks Corporation

Nitze Stagen Company

South Downtown Foundation

West Seattle

A. TEN BRIDGES TO WEST SEATTLE

Project Partners

Birthplace of Seattle Log House Museum

Southwest Seattle Historical Society

Museum of History and Industry

Port of Seattle

Engineering partner, preferably one with a teaching background

EALRs

Social Studies (Geography, History)

Science

Applications

Web

Interactive Exhibit

Background

Getting to West Seattle (or from West Seattle to Seattle's downtown) was a key component of the area's early development. Ferries and streetcars paved the way for automobiles and busses, and in the process, ten different bridges to the neighborhood were built over the Duwamish riverhead.

The proposed Green Line route may piggyback on the existing West Seattle bridge, or will build a new, adjacent bridge.

Project Description

Students will research the transportation problems facing early West Seattlites, and learn about the history and technology of the ten bridges designed to connect the neighborhood to Seattle's downtown. Working with an engineering historian familiar with the technology, students will develop an online exhibit focused on the ten bridges, their design, and how they fit in with efforts to get people to and from the neighborhood.

This project ties in with construction and thinking for the proposed Green Line route, and brings young people into the design process by thinking about how problems were solved historically.

Products

Interactive Web-based exhibit

Potential Funding Partners

A transportation agency

B. SOME ASSEMBLY REQUIRED: THE SEATTLE BUNGALOW

Project Partners

Seattle Architectural Foundation

Historic Seattle

Educational Partner

Preservation Architect(s)

American Institute of Architects, Seattle Chapter

Peter Miller Books

EALRs

Art

Mathematics

Social Studies (History)

Applications

Web

CD

Print

Background

West Seattle, like a number of neighborhoods in Seattle, is characterized by bungalows – craftsman style houses that were, in many cases, purchased through catalogues. Mass production of working and middle class houses significantly influenced dominant single family housing styles and construction during the 1910s and 20s, both in Seattle and around the country. Many Seattle residents live in kit houses that have become hugely desirable in many parts of the city.

Due to their significance as a building type near the proposed Green Line, a survey of West Seattle bungalows may take place as a part of monorail mitigation.

Project Description

Using historic primary source material – the pattern books and catalogues themselves – students will create kits that generate different versions of the Seattle bungalow. Students will learn about styles, construction methods, building terminology, the economics of the kit house, and its place in American history.

Students will learn how to translate the forms of the kit into digital format through simple computer aided architectural design technology. Students may choose to render more details of the forms or keep them free of detail. This could be expanded to include a web simulation of a bungalow being constructed, starting with its elemental forms, then showing its assembly.

Students will then design cut-out books for table-top sized bungalows with these designs that could be sold to support similar projects focused on different architectural forms, like the Seattle apartment building (appropriate in Belltown and Queen Anne within the context of the Green Line project).

Products

- Cut out books
- Web simulation of a bungalow coming together, showing the parts, then how they're assembled.

Potential Funding Partners

National Endowment for the Arts

THE BIG PICTURE

INTEGRATING THE PROJECTS

These curriculum-based projects and community-based educational programs will produce a series of films, radio programs, art works, histories, interactive exhibits, and print media that are tied together in their relationship to the Seattle Monorail Project and through their overarching concepts. In many cases, partner organizations participate in more than one project, which will add continuity to the group.

All projects promote business and historical interest in the neighborhoods and districts closest to the Green Line and its stations, and could easily be adapted into innovative exhibits within and around the stations, or into a comprehensive exhibit that either moves around from station to station, or lives at a museum, or on the web in integrated fashion, or all of these.

These projects also contribute to a greater understanding of the cultural and natural environments effected by the monorail's construction and presence in the urban landscape, and will aid in understanding impacts from future developments.

In many cases, projects may identify or produce compelling images or ideas that help create a specific identity for individual stations. For instance, Ballard's Storyboard Walk ties in with wayfinding and art elements of the station designs – an idea that could be expanded to integrate historic resources mitigation with funds for public art in and around the stations and the design of the infrastructure of the system.

Many projects proposed are driven by photogrammetry and other imaging technologies that should be considered within the context of the whole project, not a series of discrete projects. This will aid in an integrated end project regardless of its web, museum or station context. It is therefore recommended that a technology partner familiar with photogrammetry and other digital imaging be chosen for the entire package rather than asking for different RFQs for the individual projects. Technology will be the most expensive component of these projects.

Many of the projects proposed could be models for interdisciplinary curriculum design based almost solely on the use of new technologies. Given this, and the fact that projects bring together science and the humanities, the likelihood for grant funds to help offset the cost of these projects is high. Generally, projects are either science-oriented or humanities-oriented. Interdisciplinary projects maximize on all available grant funding for any kind of educational project.

APPENDIX A: WHAT ARE EALRS?

1.1.1.2 Goals for Learning

1.1.1.3 Arts

1. The student acquires the knowledge and skills necessary to create, to perform, and to respond effectively to the arts.

A1.1 understand and apply arts concepts and vocabulary to communicate ideas

A1.2 organize arts elements into artistic compositions

A1.3 use and develop arts skills and techniques to solve problems and express ideas

A1.4 use skills of craftsmanship to produce quality work

A1.5 create, present, and evaluate artworks using visual arts, music, drama, and dance

2. Creative process with arts knowledge and skills to reason and solve problems.

A2.1 use the senses to gather and process information

A2.2 generate and analyze solutions to problems using creativity and imagination

A2.3 use arts criteria to consider the effectiveness of personal work and that of others

3. The student uses at least one of the art forms (visual arts, music, drama, and/or dance) to communicate ideas and feelings.

A3.1 use image, sound, action, and movement through the arts to express individual ideas for a specific purpose

A3.2 reflect and respond critically to the use of the arts in all forms of communication

A3.3 use combinations of art forms to communicate in multimedia formats

4. The student understands how the arts connect to other subject areas, life, and work.

A4.1 use arts skills and knowledge in other subject areas

A4.2 apply ideas and skills developed in the arts to daily life

A4.3 demonstrate an ability to use artistic knowledge in personal and community decision making

A4.4 recognize the influence of the arts in shaping and reflecting cultures and history

A4.5 incorporate arts knowledge and skills into the workplace

1.1.1.4 Communication

1. The student uses listening and observation skills to gain understanding.

C1.1 focus attention

C1.2 listen and observe to gain and interpret information

C1.3 check for understanding by asking questions and paraphrasing

2. The student communicates ideas clearly and effectively.

C2.1 communicate clearly to a range of audiences for different purposes

C2.2 develop content and ideas

C2.3 use effective delivery

C2.4 use effective language and style

C2.5 effectively use action, sound, and/or images to support presentations

3. The student uses communication strategies and skills to work effectively with others.

C3.1 use language to interact effectively and responsibly with others

C3.2 work cooperatively as a member of a group

C3.3 seek agreement and solutions through discussion

4. The student analyzes and evaluates the effectiveness of formal and informal communication.

C4.1 assess strengths and need for improvement

C4.2 seek and offer feedback

C4.3 analyze mass communication

C4.4 analyze how communication is used in career settings

1.1.1.5 Health and Fitness

1. The student acquires the knowledge and skills necessary to maintain an active life: movement, physical, fitness, and nutrition.

F1.1 develop fundamental physical skills and progress to complex movement activities as physically able

F1.2 incorporate rules and safety procedures into physical activities

F1.3 understand the concepts of physical fitness and develop and monitor progress on personal fitness goals

F1.4 understand nutrition and food nutrients and how they affect physical performance and the body

2. The student acquires the knowledge and skills necessary to maintain a healthy life: recognize patterns of growth and development, reduce health risks, and live safely.

F2.1 recognize patterns of growth and development

F2.2 understand the transmission and control of communicable and non-communicable diseases

F2.3 acquire skills to live safely

3. The student analyzes and evaluates the impact of real-life influences on health.

F3.1 understand how environmental factors affect one's health

F3.2 gather and analyze health information

F3.3 use social skills to protect health and safety in a variety of situations

F3.4 understand how emotions influence decision-making

4. The student effectively analyzes health and safety information to develop health and fitness plans based on life goals.

F4.1 assess needs and resources

F4.2 develop a health and fitness plan and a monitoring system

Mathematics

1. The student understands and applies the concepts and procedures of mathematics.

M1.1 understand and apply concepts and procedures from number sense

M1.2 understand and apply concepts and procedures from measurement

M1.3 understand and apply concepts and procedures from geometric sense

M1.4 understand and apply concepts and procedures from probability and statistics

M1.5 understand and apply concepts and procedures from algebraic sense

2. The student uses mathematics to define and solve problems.

M2.1 investigate situations

M2.2 formulate questions and define the problem

M2.3 construct solutions

3. The student uses mathematical reasoning.

M3.1 analyze information

M3.2 predict results and make inferences

M3.3 draw conclusions and verify results

4. The student communicates knowledge and understanding in both everyday and mathematical language.

M4.1 gather information

M4.2 organize and interpret information

M4.3 represent and share information

5. The student understands how mathematical ideas connect within mathematics, to other subject areas, and to real-life situations.

M5.1 relate concepts and procedures within mathematics

M5.2 relate mathematical concepts and procedures to other disciplines

M5.3 relate mathematical concepts and procedures to real-life situations

Reading

1. The student understands and uses different skills and strategies to read.

R1.1 use word recognition and word meaning skills to read and comprehend text

R1.2 build vocabulary through reading

R1.3 read fluently, adjusting reading for purpose and material

R1.4 understand elements of literature -- fiction

R1.5 use features of nonfiction text and computer software

2. The student understands the meaning of what is read.

R2.1 comprehend important ideas and details

R2.2 expand comprehension by analyzing, interpreting, and synthesizing information and ideas

R2.3 think critically and analyze authors' use of language, style, purpose, and perspective

3. The student reads different materials for a variety of purposes.

R3.1 read to learn new information

R3.2 read to perform a task

R3.3 read for literary experience

R3.4 read for career applications

4. The student sets goals and evaluates progress to improve reading.

R4.1 assess strengths and need for improvement

R4.2 seek and offer feedback to improve reading

R4.3 develop interests and share reading experiences

1.1.1.6 Social Studies -*Civics

1. The student understands and can explain the core values and principles of the U.S. democracy as set forth in foundational documents, including the Declaration of Independence and the Constitution.

V1.1 understand and interpret the major ideas of foundational documents

V1.2 examine key ideals of U.S. democracy

V1.3 examine representative government and citizen participation

2. The student analyzes the purposes and organization of governments and laws.

V2.1 understand and explain the organization of U.S. government

V2.2 understand the function and effect of law

V2.3 compare and contrast democracies with other forms of government

3. The student understands the purposes and organization of international relationships and how U.S. foreign policy is made.

V3.1 understand how the world is organized politically and how nations interact

V3.2 recognize factors and roles that affect the development of foreign policy

4. The student understands the rights and responsibilities of citizenship and the principles of democratic civic involvement.

V4.1 understand individual rights and their accompanying responsibilities

V4.2 identify and demonstrate rights of U.S. citizenship

V4.3 explain how citizen participation influences public policy

1.1.1.7 Social Studies -*Economics

1. The student understands basic economic concepts and analyzes the effect of economic systems on individuals, groups, and society.

E1.1 comprehend key economic concepts and economic systems

E1.2 observe major forms of business and related careers

E1.3 understand the monetary system of the U.S. and how individuals' economic choices involve costs and consequences

E1.4 examine how government policies influence the economy

E1.5 examine the importance of international trade

1.1.1.8 Social Studies -*Geography

1. The student uses maps, charts, and other geographic tools to understand the spatial arrangement of people, places, resources, and environments on Earth's surface.

G1.1 use and construct maps, charts, and other resources

G1.2 recognize spatial patterns on Earth's surface and understand the processes that create these patterns

2. The student understands the complex physical and human characteristics of places and regions.

G2.1 describe the natural characteristics of places and regions

G2.2 describe the patterns humans make on places and regions

G2.3 identify the characteristics that define the Pacific Northwest and the Pacific Rim as regions

3. The student observes and analyzes the interaction between people, the environment, and culture.

G3.1 identify and examine people's interaction with and impact on the environment

G3.2 analyze how the environment and environmental changes affect people

G3.3 examine cultural characteristics, transmission, diffusion, and interaction

1.1.1.9 Social Studies -*History

1. The student examines and understands major ideas, eras, themes, developments, turning points, chronology, and cause-and-effect relationships in U.S., World, and Washington State History.

H1.1 understand historical time, chronology, and causation

H1.2 analyze turning points and interpret major ideas in U.S., World, and Washington State History

H1.3 examine the influence of culture on U.S., World, and Washington State History

2. The student applies the methods of social science investigation to compare and contrast interpretations of historical events.

H2.1 investigate and research

H2.2 analyze historical information

H2.3 synthesize information and reflect on findings

3. The student understands the origin and impact of ideas and technological developments on history and social change.

H3.1 explain the origin and impact of an idea on society

H3.2 analyze how historical conditions shape the emergence of ideas and how ideas change over time

H3.3 understand how ideas and technological developments influence people, resources, and culture

1.1.1.10 Science

1. The student understands and uses scientific concepts and principles.

S1.1 use properties to identify, describe, and categorize substances, materials, and objects

S1.2 identify, describe, and categorize living things based on their characteristics

S1.3 measure properties and characteristics

S1.4 recognize the components, structure, and organization of systems and the interconnections within and among them

S1.5 understand that interactions within and among systems cause changes in matter and energy

S1.6 construct and use models to predict, test, and understand scientific phenomena

2. The student conducts scientific investigations to expand understanding of the natural world.

S2.1 plan and implement scientific investigations

S2.2 think logically, analytically, and creatively

S2.3 practice the principles of scientific inquiry

S2.4 understand the relationship between evidence and scientific explanation

3. The student applies science knowledge and skills to solve problems or meet challenges.

S3.1 identify problems and challenges in which science knowledge and skills can be applied

S3.2 research, design, and test a variety of ways to address problems and/or challenges

S3.3 evaluate solutions and consequences

4. The student uses effective communication skills and tools to build and demonstrate understanding of science.

S4.1 use listening, observing, and reading skills to obtain science information

S4.2 use writing and speaking skills to organize and express science ideas

S4.3 use effective communication strategies and tools to prepare and present science information

5. The student understands how science knowledge and skills are connected to other subject areas and real-life situations.

S5.1 use mathematics to enhance scientific understanding

S5.2 understand the relationship between science and technology

S5.3 examine the relationship between science and history

S5.4 examine the relationships among science, society, and the workplace

1.1.1.11

1.1.1.12 Writing

1. The student writes clearly and effectively.

W1.1 develop concept and design

W1.2 use style appropriate to the audience and purpose

W1.3 apply writing conventions

2. The student writes in a variety of forms for different audiences and purposes.

W2.1 write for different audiences

W2.2 write for different purposes

W2.3 write in a variety of forms

W2.4 write for career applications.

3. The student understands and uses the steps of the writing process.

W3.1 pre write

W3.2 draft

W3.3 revise

W3.4 edit

W3.5 publish

4. The student analyzes and evaluates the effectiveness of written work.

W4.1 assess own strengths and needs for improvement

W4.2 seek and offer feedback

Appendix B: What is Photogrammetry?

Source: Institute for Prehistory and Protohistory at the University of Vienna, Luftbildarchiv

Introduction to Photogrammetry

This brief introduction is written for non-photogrammetrists. It should give a rough overview about photogrammetry, its history, used instruments and some common techniques. It was not intended to be a complete reference. To get more detailed information, please choose an adequate publication from the Literature section.

What is Photogrammetry?

Photogrammetry is the technique of measuring objects (2D or 3D) from photo-grammes. We say commonly photographs, but it may be also imagery stored electronically on tape or disk taken by video or CCD cameras or radiation sensors such as scanners.

Results can be:

- coordinates of the required object-points
- topographical and thematical maps
- and rectified photographs (orthophoto).

Its most important feature is the fact that the objects are measured without being touched. Therefore, the term “remote sensing” is used by some authors instead of “photogrammetry.” “Remote sensing” is a rather young term, which was originally confined to working with aerial photographs and satellite images. Today, it includes also photogrammetry, although it is still associated rather with “image interpretation.”

Principally, photogrammetry can be divided into the following, depending on the lens-setting:

Far range photogrammetry (with camera distance setting to indefinite), and

Close range photogrammetry (with camera distance settings to finite values).

Another grouping can be:

Aerial photogrammetry (which is mostly far range photogrammetry), and

Terrestrial Photogrammetry (mostly close range photogrammetry).

The applications of photogrammetry are widely spread. Principally, it is utilized for object interpretation (What is it? Type? Quality? Quantity) and object measurement (Where is it? Form? Size?).

Aerial photogrammetry is mainly used to produce topographical or thematical maps and digital terrain models.

Among the users of close-range photogrammetry are architects and civil engineers (to supervise buildings, document their current state, deformations or damages), archaeologists, surgeons (plastic surgery) or police departments (documentation of traffic accidents and crime scenes), just to mention a few.

Short description of photogrammetrical techniques

Photographing Devices: A photographic image is a “central perspective.” This implies, that every light ray, which reached the film surface during exposure, passed through the camera lens (which is mathematically considered as a single point, the so called “perspective center”). In order to take measurements of objects from photographs, the ray bundle must be reconstructed. Therefore, the internal geometry of the used camera (which is defined by the focal length, the position of the principal point and the lens distortion) has to be precisely known. The focal length is called “principal distance”, which is the distance of the projection center from the image plane’s principal point.

Depending on the availability of this knowledge, the photogrammetrist divides photographing devices into three categories:

Metric cameras: They have stable and precisely known internal geometries and very low lens distortions. Therefore, they are very expensive devices. The principal distance is constant, which means, that the lens cannot be sharpened when taking photographs. As a result, metric cameras are only usable within a limited range of distances towards the object.

The image coordinate system is defined by (mostly) four fiducial marks, which are mounted on the frame of the camera.

Terrestrial cameras can be combined with tripods and theodolites.

Aerial metric cameras are built into aeroplanes mostly looking straight downwards. Today, all of them have an image format of 23 by 23 centimeters.

Stereometric cameras: If an object is photographed from two different positions, the line between the two projection centers is called “base”. If both photographs have viewing directions, which are parallel to each other and in a right angle to the base (the so called “normal case”), then they have similar properties as the two images of our retinas. Therefore, the overlapping area of these two photographs (which are called a “stereopair”) can be seen in 3D, simulating man’s stereoscopic vision.

In practice, a stereopair can be produced with a single camera from two positions or using a stereometric camera.

A stereometric camera in principle consists of two metric cameras mounted at both ends of a bar, which has a precisely measured length (mostly 40 or 120 cm). This bar is functioning as the base. Both cameras have the same geometric properties. Since they are adjusted to the normal case, stereopairs are created easily.

“Amateur” cameras: The photogrammetrist speaks of an “amateur camera”, when the internal geometry is not stable and unknown, as is the case with any normal commercially available camera. However, also these can be very expensive and technically highly developed professional photographic devices. Photographing a test field with many control points and at a repeatably fixed distance setting (for example at infinity), a “calibration” of the camera can be calculated. In this case, the four corners of the camera frame function as fiducials. However, the precision will never reach that of metric cameras. Therefore, they can only be used for purposes, where no high accuracy is demanded. But in many practical cases such photography is better than nothing, and very useful in cases of emergency.

Photogrammetric Techniques

Depending on the available material (metric camera or not, stereopairs, shape of recorded object, control information, etc) and the required results (2D or 3D, accuracy, etc), different photogrammetric techniques can be applied. Depending on the number of photographs, three main-categories can be distinguished.

Mapping from a single photograph: Only useful for plane (2D) objects. Obliquely photographed plane objects show perspective deformations which have to be rectified. For rectification exists a broad range of techniques. Some of them are very simple. However, there are some limitations. To get good results even with the simple techniques, the object should be plane (as for example a wall), and since only a single photograph is used, the mappings can only be done in 2D

The rectification can be neglected, only if the object is flat and the picture is made from a vertical position towards the object. In this case, the photograph will have a unique scale factor, which can be determined, if the length of at least one distance at the object is known.

Some common techniques:

Paper strip method: This is the cheapest method, since only a ruler, a piece of paper with a straight edge and a pencil are required. It was used during the last century. Four points must be identified in the picture and in a map. From one point, lines have to be drawn to the others (on the image and the map) and to the required object point (on the image). Then the paper strip is placed on the image and the intersections with the lines are marked. The strip is then placed on the map and adjusted such that the marks coincide again with the lines. After that, a line can be drawn on the map to the mark of the required object point.

The whole process is repeated from another point, giving the object-point on the map as intersection of the two object-lines.

Optical rectification: Is done using photographic enlargers. These should fulfill the so called “Scheimpflug condition” and the “vanishing-point condition.” Again, at least four control points are required, not three on one line. The control points are plotted at a certain scale. The control point plot is rotated and displaced until two points match the corresponding object points from the projected image. After that, the table has to be tilted by two rotations, until the projected negative fits to all control points. Then an exposure is made and developed.

Numerical rectification: Again, the object has to be plane and four control points are required. At the numerical rectification, the image coordinates of the desired object-points are transformed into the desired coordinate system (which is again 2D). The result is the coordinates of the projected points.

Differential rectification: If the object is uneven, it has to be divided into smaller parts, which are plane. Each part can then be rectified with one of the techniques shown above. Of course, also even objects may be rectified piecewise, differentially. A prerequisite for differential rectification is the availability of a digital object model, i.e. a dense raster of points on the object with known distances from a reference plane; in aerial photogrammetry it is called a DTM (Digital Terrain Model).

Monoplotting: This technique is similar to the numerical rectification, except that the coordinates are transformed, in this case, into a 3D coordinate system. First, the orientation elements, that are the coordinates of the projection center and the three angles defining the view of the photograph, are calculated by spatial resection. Then, using the calibration data of the camera, any ray coming from the archaeological feature through the lens onto the photograph can be reconstructed and intersected with the digital terrain model.

Digital rectification: The digital rectification is a rather new technique. It is somehow similar to “monoplotting.” But here, the scanned image is transformed pixel by pixel into the 3D real-world coordinate system. The result is an orthophoto, a rectified photograph, that has a unique scale.

Stereophotogrammetry: As the term already implies, stereopairs are the basic requirement, here. These can be produced using stereometric cameras. If only a single camera is available, two photographs can be made from different positions, trying to match the conditions of the “normal case.”

Vertical aerial photographs come mostly close to the “normal case.” They are made using special metric cameras, that are built into an aeroplane looking straight downwards. While taking the photographs, the aeroplane flies over a certain area in a meandric way, so that the whole area is covered by overlapping photographs.

The overlapping part of each stereopair can be viewed in 3D and consequently mapped in 3D using one of following techniques:

Analogue: The analogue method was mainly used until the 1970s. Simply explained, the method tries to convert the recording procedure. Two projectors, which have the same geometric properties as the used camera (these can be set during the so called “inner orientation”), project the negatives of the stereopair. Their positions then have to be exactly rotated into the same relationship towards each other as at the moment of exposure (“relative orientation”). After this step, the projected bundle of light rays from both photographs intersect with each other forming a (three dimensional optical) “model.” At last, the scale of this model has to be related to its true dimensions and the rotations and shifts in relation to the mapping

(world) coordinate system are to be determined. Therefore, at least three control points, which are not on one straight line, are required (“absolute orientation”).

The optical model is viewed by means of a stereoscope. The intersection of rays can then be measured point by point using a measuring mark. This consists of two marks, one on each photograph. When viewing the model, the two marks fuse into a 3D one, which can be moved and raised until the desired point of the 3D object is met. The movements of the mark are mechanically transmitted to a drawing device. In that way, maps are created.

Analytical: The first analytical plotters were introduced in 1957. From the 1970ies on, they became commonly available on the market. The idea is still the same as with analogue instruments. But here, a computer manages the relationship between image- and real-world coordinates.

The restitution of the stereopair is done within three steps:

After restoration of the “inner orientation”, where the computer may now also correct for the distortion of the film, both pictures are relatively oriented. After this step, the pictures will be looked at in 3D. Then, the absolute orientation is performed, where the 3D model is transferred to the real- world coordinate system. Therefore, at least three control points are required.

After the orientation, any detail can be measured out of the stereomodel in 3D. Like in the analogue instrument, the model and a corresponding measuring mark are seen in 3D. The movements of the mark are under your control. The main difference to the former analogue plotting process is that the plotter doesn’t plot any more directly onto the map but onto the monitors screen or into the database of the computer.

The analytical plotter uses the computer to calculate the real-world coordinates, which can be stored as an ASCII file or transferred on-line into CAD-programs. In that way, 3D drawings are created, which can be stored digitally, combined with other data and plotted later at any scale.

Digital: Digital techniques have become widely available during the last decade. Here, the images are not on film but digitally stored on tape or disc. Each picture element (pixel) has its known position and measured intensity value, only one for black/white, several such values for colour or multispectral images.

Mapping from several photographs: This kind of restitution, which can be done in 3D, has only become possible by analytical and digital photogrammetry. Since the required hard- and software is steadily getting cheaper, it’s application fields grow from day to day.

Here, mostly more than two photographs are used. 3D objects are photographed from several positions. These are located around the object, where any object-point should be visible on at least two, better three photographs. The photographs can be taken with different cameras (even „amateur” cameras) and at different times (if the object does not move). As mentioned above, only analytical or digital techniques can be used.

During all methods, first a bundle adjustment has to be calculated. Using control points and triangulation points the geometry of the whole block of photographs is reconstructed with high precision.

Then the image coordinates of any desired object-point measured in at least two photographs can be intersected. The result are the coordinates of the required points. In that way, the whole 3D object is digitally reconstructed.